

# SPECIAL BANKERS' EDITION.

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL  
RAILROAD AND FINANCIAL NEWSPAPER.

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plies & Tools.**  
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Haines, Jones & Cad-  
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Hetherington & Nason.  
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dry Co.  
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(See also Towns.)  
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Mineral and Tim. Land  
Co. of the South.  
Munson & Bro.  
Darlington Land & Im-  
provement Co.  
J. H. Wiley.  
Waterloo Land Mining  
& Mfg. Co.
- Road Rollers.**  
Foudry & Mch. Depart.  
of Har'g Car Mfg. Co.
- Roofing.**  
Cincin. Corrugating Co.  
Empire Paint & Rfg. Co.  
Canton Steel Roof'g Co.  
Globe Iron Roofing and  
Corrugating Co.  
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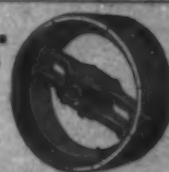
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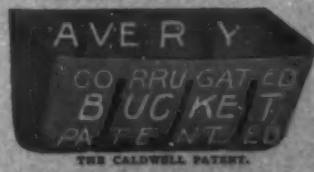
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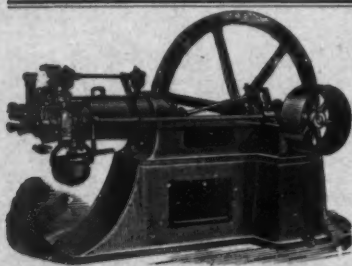
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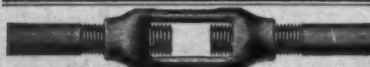
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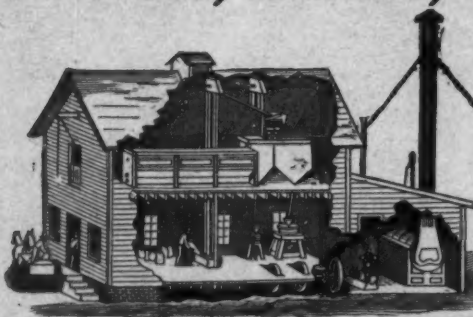
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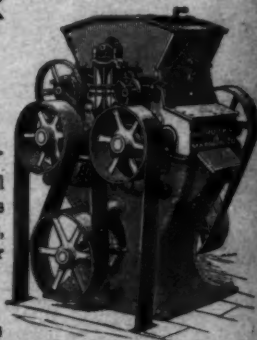


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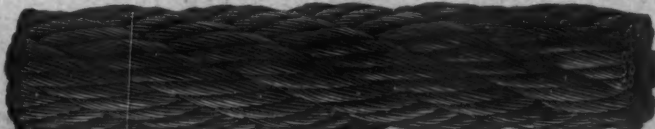
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VOL. XVI. No. 20.  
WEEKLY.

BALTIMORE. DECEMBER 21, 1889.

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## To the Bankers of the United States.

That section of the United States known as the South, has, in the last few years, assumed a prominent, if not a predominate place in the attention and interest of the business world, and is becoming every day a more important factor in the course and conditions of trade. Much has been said and written about the astounding advance the South is making in the practical utilization of its natural sources of wealth. Men everywhere are talking about the industrial progress of the South, and the attendant opportunities for the profitable investment of money. The MANUFACTURERS' RECORD, in pursuance of the purpose for which it is published, has furnished to its readers a weekly record of this progress. There are many, however, whose interest in the South is of recent date, and who do not know of all that has been done since the beginning of this industrial era. The nature and source of inquiries that for the past few months have been coming to us in continually increasing volume, indicate on the part of those who control financial institutions and direct investments, a desire for accurate information as to the steps the South has taken in its industrial advancement. It is to meet this want that this edition of the MANUFACTURERS' RECORD is published. Its purpose is to furnish a comprehensive review of the development of the South as a whole; a general summary of such facts and figures as will enable the reader to have a clear idea of what is meant by "Southern progress."

These facts and figures make a more forcible and convincing presentation of the possibilities of the South than could be embodied in any arguments based on theory, and in order that the South may have the benefit of the widest publicity that can be given them, it is proposed to send a copy of this edition to every national, State and private bank in the United States, loan and trust companies, and other financial institutions. We ask of all who receive it a careful study of the facts presented, and we should be glad to follow this edition with the regular weekly issue. The MANUFACTURERS' RECORD is the universally accepted authority on Southern affairs; the only recognized source of full and authentic information concerning the whole South. Its readers are kept thoroughly informed as to the resources and advancement of the South, and it is a necessity to all who are or expect to be in any way interested in that section. The subscription price is \$4.00 a year.

EVERY business man in the country, especially every banker, will find the elaborate review in this issue of the growth of the banking interests of the United States during the last ten years of much practical value.

THE energy and capital that developed the West, "is now," says Hon. Wm. D. Kelley, of Pennsylvania, "seeking a new field of investment, and there is no spot on earth sufficient for it and within its reach but the South."

## THE SOUTH'S REDEMPTION.

### FROM POVERTY TO PROSPERITY.

In 1860 the Richest Part of the Country—In 1870 the Poorest—In 1880 Signs of Improvement—In 1889 Regaining the Position of 1860.

By RICHARD H. EDMONDS, Editor MANUFACTURERS' RECORD.

"The South is the coming El Dorado of American adventure. May the Almighty speed and guide her onward progress!" So wrote the Hon. William D. Kelley a few months ago, and every day brings forth new evidence to prove the correctness of his prediction and to show that without a doubt the South is to be the richest country upon the globe. This is no visionary forecast. Many years will be required to enable the South to attain that position, but not many will have passed before it shall have been demonstrated that this future certainly awaits this section. The combination of advantages possessed by the South for the development of great wealth is not equaled by any other country in Europe or America. In fact, here are combined the chief advantages and resources of nearly all other countries, without their most serious disadvantages.

In climate, soil, mineral and timber wealth, in rivers large and small, in a long sea coast, in an abundant rainfall, in healthfulness and in every other advantage that could be asked, nature seems to have done her best for this favored land. Every variety of soil, suitable for every branch of agriculture, can be found ready to yield an abundant harvest. The wealth in iron and coal is beyond estimate; and, in fact, its extent is not yet half known or dreamed of, while no other section possesses such a wide range and such an abundant supply of other minerals needed in the arts and sciences. Of timber there is a seemingly almost unlimited supply, including nearly every variety of hardwoods used for wood-working purposes.

No one can carefully study the remarkable combination of resources which the South enjoys without being convinced that, in natural advantages, this section stands far ahead of any other country in the world; and with the rapid progress now being made in the development of all these resources, the South is entering upon a period of prosperity greater than any part of this country has ever yet enjoyed. The conditions for this are far more favorable than in the West during the period of the most rapid growth of that region, and this prosperity being free from fictitious inflation will be permanent.

At the close of the most disastrous war in the world's history, the South was in a deplorable condition—beyond the power of words to describe. Its business interests had been destroyed; for four years it had been drained of everything that could help to maintain its armies; it had been the battle-ground of millions of men; its cities and its towns were in many places in ruins; its fields devastated and its fences destroyed; blackened chimneys marked the sites where thousands of fine dwellings had stood; its foremost men had been killed by the tens of thousands, and so gloomy was the outlook when the war ended that hundreds of thousands of the young and vigorous men and boys that were growing up left during the next few years for the West and Southwest, and for the North; the hundreds of millions of dollars that had been invested in slaves, just as the North invested its earnings in manufactures, were wiped out of existence, though, of course, the slaves themselves remained there; and, added to all these misfortunes, was a

disorganized labor system. Then came political misrule and degradation, against which it seemed hopeless to strive. This was only finally overcome scarcely twelve years ago.

It is not extravagant to say that the actual money loss to the South from the war aggregated at least \$5,000,000,000. The census of 1870 showed the assessed value of property in the South for that year to be \$2,100,000,000 less than in 1860, but this, of course, does not represent the total losses. It does not cover the enormous sums spent in carrying on the war, the loss of so many thousands of the leading men by death and emigration, the chaos resulting from the war, and the disorganized condition of the whole labor system of the country. Taking all these things into consideration, \$5,000,000,000 is a very conservative estimate of the South's loss financially.

In 1880 the total amount of capital invested in manufactures in the United States was \$2,700,000,000. If we could conceive of some disaster that would have entirely blotted out every manufacturing enterprise in the whole country in 1880, and every dollar invested in them, the aggregate destruction of property would have been only about half as great as the losses entailed upon the South by the war. It is impossible to comprehend what it would mean, if at one blow every manufacturing enterprise in this country were wiped out of existence, and yet the sufferings and poverty which would follow such a disaster would hardly be equal to what the South had to face when it laid down its arms in 1865. These facts are mentioned that the South may receive the greater credit for the amazing progress which has been made in the last few years.

So rapid has been the industrial advancement of that section during the last eight or nine years, and more especially during the last four, that the business world is now seeking information about every phase of Southern growth, and of the South's resources. Capitalists in Europe and America are looking to the South as the field for investment; manufacturers of iron, cotton and lumber, realizing that the South is destined to control all of these and allied industries, are directing their attention to this section. The cry is no longer "Go West," but "Go South, young man," and for the purpose of presenting a general view of what has actually been accomplished, and not simply projected or talked of, this condensed summary has been compiled. Its only aim is to make plain by figures what has been done, and in connection therewith to give a few statements that will carry weight, because they are from the highest authorities, to show what are the possibilities of the South.

In the early part of the present year many prominent capitalists and manufacturers went South to "spy out the land." Among the number were such men as Hon. Abram S. Hewitt and Hon. Edward Cooper, of the widely-known iron and steel firm of Cooper, Hewitt & Co.; Mr. Andrew Carnegie, the most extensive iron and steel manufacturer in America; Mr. Frederick Taylor, a leading New York banker; Hon. H. B. Peirce, secretary of State of Massachusetts; Hon. D. H. Goodell, governor of New Hampshire, and many others. These are mentioned because of the influence which their statements carry, and because they cannot be charged with being partial to the South.

Letters were written to the MANUFACTURERS' RECORD by a number of these gentlemen, giving their views upon the resources of the South and the progress made by that section in the last few years. Mr. Carnegie wrote that he regarded the South "as Pennsylvania's most formidable industrial enemy in the future."

Mr. Taylor, who made a careful study of the situation in connection with Messrs. Hewitt and Cooper, stated that the South was a revelation to him. "It seemed to me," wrote Mr. Taylor, "that we traveled through a continuous and unbroken strain of what has been aptly termed the music of progress—the whirr of the spindle, the buzz of the saw, the roar of the furnace, and the throb of the locomotive." To the young men of the South he accords high praise for the work which they are doing, and to "the eager, earnest, restless, driving energy which seems to fill them." Referring to the section through which they passed, he says: "The country through which we traveled was varied, and in many respects beautiful; its valleys fair as the vale of Cashmere, its mountain scenery wild at times as the Alps." "The South, to my mind, is only now on the threshold of its boom." "It has every possible advantage—everything, indeed, that God can give." "The New South has been built up by the indomitable energy and by the hard work of the Southern people themselves," and finally, in closing this most striking letter, Mr. Taylor added, "to any young man, to-day, of pluck and grit, with the world before him and his fortune to make, I should say, 'go South, young man, go South.'"

Hon. Henry B. Peirce wrote: "I can add little to what has been so well said, and so many times said, of late, by Northern men who have been South, as to the resources and advantages of that wonderful section which includes Northern Alabama. I am thoroughly convinced that it is to be the great iron center of the world, and that the people will marvel at the growth which will be brought about during the next twenty-five years. The South will receive the greatest direct benefit, because of a revolution socially, politically, industrially and in an educational way, which it will undergo in this process, a revolution so gradual and yet so fraught with immediate blessing that it will be accomplished without friction. I predict for the New South an era of prosperity which shall eclipse any which has ever been achieved in any other section of our great country, so remarkable for its successes in that line."

Sir Lowthian Bell, of England, one of the highest living authorities on iron manufactures, recently made the following statement: "Ultimately there seems nothing, so far as our present knowledge permits us to judge, to prevent these Southern States from becoming the cheapest iron-making centres in the Union."

Mr. J. C. Fuller, president of the United States Charcoal Iron Workers' Association, which is composed of all the manufacturers of charcoal iron in the country, while on a visit to the South, said: "I have to-day witnessed what I have hitherto considered existed only in the imagination of the enthusiast. I have seen coal ore and limestone in almost

fabulous deposits in so close proximity to one another as to undoubtedly assure to Alabama the honor of becoming one of the foremost iron-producing regions of the world."

To these strong statements I would add an extract from a letter in the MANUFACTURERS' RECORD by Hon. William D. Kelley, of Pennsylvania, one of the foremost statesmen of the day; a man of broad views, who, though a lover of his own State, looks beyond its borders and sees in the development of the South the future grandeur of this country, and rejoices that whatever builds up this section adds to the prosperity and progress of the United States as one great country. Judge Kelley weighs his words carefully, and hence the following extracts are worthy of thoughtful attention. The most enthusiastic Southerner could not paint a more glowing picture of the South's advantages, the beauty of its scenery, the charm of its climate, the wealth of its mineral resources, and the possibilities of its future.

"In the closing paragraph of my little book," wrote Judge Kelley, "'The Old South and the New,' two sentences have caused me much questioning. I say there 'wealth and honor are in the pathway of the New South,' and again, 'she is the coming El Dorado of American adventure.' My friends have thought me too sanguine; but the States south of the Ohio and east of the Mississippi, with their half million square miles of area, contain a wealth great enough for a continent—a wealth so vast, so varied in its elements and character, so advantageously placed for development, that these States alone can sustain a population far greater than the population of the United States to-day. Their products would be so different from those of other portions of the country as to afford the most profitable exchange, advantageous to all. And it is in these States that we must find the new and greater market for Northern surplus, whether that surplus be in the shape of accumulated labor of the past—that is to say, capital—or the future productions of labor, or of labor itself, because in these Southern States, more than elsewhere, the natural conditions of success exist. As to the rapidity with which it can be done, the past growth of the West furnishes the best answer. It was the building of an empire in the West that relieved and enriched the East as well as the West. The enormous energies, the 'plant' used in that task, unparalleled in the magnitude of the work and the greatness of the reward to all, is now seeking a new field of investment, and there is no spot on earth sufficient for it and within its reach but the South.

"I have traveled much in the South since the war, and have always been keenly interested in every step of progress she has made, and eager to learn all I could of Southern resources and advantages. I have urged my friends to go there, and my son is there now, with all that he has, embarked in a manufacturing enterprise. I do not consider that there ever existed in the West, great as its wealth is, nor in any other portion of the country, anything like the natural wealth of the South. A very large part of the South is blessed with a climate unexcelled, if equaled, elsewhere in the world. As to the mountainous region of the South, it is richer in natural wealth and in advantages for the development of that wealth; it has a finer climate, better water, and higher condition of health than any region of which I have any knowledge, and is, withal, one of the most beautiful regions in the world."

Equally as enthusiastic statements made by other eminent authorities could be given almost without limit. Every honest investigator of the South's advantages freely admits the truth of what has been claimed for that section.

Blessed with such marvellous advantages, what has the South accomplished? is a question which the world has a right to ask. It is needless to enter into any discussion of the reasons why the South did not undergo industrial development prior to the war. Her people preferred to give their attention to agriculture. But it may be well to call attention to the fact that when the census of 1860 was taken the South ranked very high in wealth as compared with the rest of the country, showing that she was not slothful in the business of money-making. In that year the assessed value of property in Georgia was greater than the combined wealth of Maine, New Hampshire, Vermont and Rhode Island. South Carolina was \$68,000,000 richer than Rhode Island and New Jersey. Mississippi outranked Connecticut by \$160,000,000. In the assessed value of property per capita, Connecticut stood first in rank; Rhode Island, second; South Carolina, third; Mississippi, fourth; Massachusetts, fifth; Louisiana, sixth; Georgia, seventh; District of Columbia, eighth; Florida, ninth; Kentucky, tenth; Alabama, eleventh; Texas, twelfth; New Jersey, thirteenth; Maryland, fourteenth; Arkansas, fifteenth; Virginia, sixteenth, and Ohio, seventeenth. New York and Pennsylvania were also far behind the South in the amount of wealth in proportion to population, the former State ranking twenty-second, and the latter thirtieth. By 1870 there was a startling change. The assessed value of property in New York and Pennsylvania alone was greater than in the whole South; Massachusetts had just one-half as much wealth as the fourteen Southern States combined. South Carolina, which in 1860 had been third in rank in wealth in proportion to the number of her inhabitants, had dropped to be the thirtieth; Georgia, from the seventh to the thirty-ninth; Mississippi, from the fourth place to the thirty-fourth; Alabama, from the eleventh to the forty-fourth; Kentucky, from tenth to twenty-eighth, and the other Southern States had gone down in the same way, while the Northern and Western States had steadily increased in wealth. In 1860 the assessed value of property in South Carolina, according to the census, was \$489,000,000, while the combined values in Rhode Island and New Jersey aggregated \$421,000,000 or \$68,000,000 less than South Carolina's. In 1870 the combined values in Rhode Island and New Jersey amounted to \$868,000,000 and the value in South Carolina was \$183,000,000. Thus, while South Carolina had \$68,000,000 more assessed property in 1860 than these two States, it had in 1870 \$685,000,000 less than they had. In 1860 the total assessed value of property in the United States was \$12,000,000,000, and of this the South had \$5,200,000,000, or 44 per cent.; in 1870 the total for the country was \$14,170,000,000, and of this the South had only \$3,064,000,000, or 22 per cent.



The assessed value of property in the South, as already stated, was \$2,100,000,000 less in 1870 than in 1860, while in the rest of the country there was an increase of over \$4,000,000,000 during that decade. Not until about 1876 were there any decided indications of a change for the better in the South. By 1879-80 an improvement was seen, and it is since that time that the most marked progress has been made. That this progress has been phenomenal, and especially when the poverty of this section at that time is taken into account, the statistics given in this issue of the MANUFACTURERS' RECORD will certainly make plain. A comparison of the assessed value of property, by States, in 1880 and 1889, gives the following:

	1880.	1889.	INCREASE.
Maryland.....	\$499,187,408	\$477,398,380	\$ 18,210,972
Virginia.....	393,997,613	* 344,169,473	40,171,860
North Carolina.....	169,916,907	217,000,000	47,083,093
South Carolina.....	129,551,624	145,280,343	15,728,343
Georgia.....	251,424,651	380,289,314	128,864,663
Florida.....	31,157,846	93,800,000	62,642,154
Alabama.....	139,077,328	242,197,531	103,120,203
Mississippi.....	115,130,651	157,830,431	42,699,780
Louisiana.....	177,096,459	226,392,288	49,295,827
Texas.....	311,470,736	710,000,000	398,529,264
Arkansas.....	91,191,653	166,000,000	74,808,347
Tennessee.....	211,768,438	325,118,636	113,350,198
West Virginia.....	146,991,740	183,013,737	36,021,997
Kentucky.....	375,473,041	551,676,267	176,203,226
Total.....	\$2,913,436,095	\$4,220,166,400	\$1,306,729,927

The Census report of 1879-80 estimated that the assessed value of property in the South was only 41 per cent. of the true value. On this basis the true value of property in the South in 1880 was \$7,105,917,300, and the value at present \$10,293,088,700—a gain of over \$3,000,000,000.

The history of many Southern towns during the last five years reads almost like a romance. While Birmingham, Chattanooga, Anniston, Roanoke, Dallas, Fort Worth and many of the most widely advertised industrial centers have grown with a rapidity that is almost beyond belief, other towns and cities all through the South have kept well up in the march of progress. Louisville, Atlanta, Nashville, Richmond, Charleston, Savannah, Columbus, Knoxville and Augusta have not fallen much behind the most rapidly growing places. In 1880 Knoxville had 9,000 inhabitants, and the assessed value of its property was \$3,485,000; now its population is estimated at 42,000, and the value of its property is \$9,500,000. Louisville has increased its population from 123,000 to 227,000, and the capital invested in manufactures from \$21,900,000 to \$35,000,000. Nashville had a population of 46,000 in 1880, and now has about 110,000. Columbus, Ga., which now has 30,000 inhabitants and \$5,300,000 invested in factories, had 10,000 inhabitants in 1880, and but \$2,400,000 in its manufactures. Charleston, S. C., which is not much heard of as a manufacturing center, has \$7,340,000 invested in manufactures, against \$1,824,000 in 1880. Richmond, New Orleans and other of the older cities have made similar progress.

In the newer, or what is known as the booming towns, the gain in population and capital employed in manufacturing has been astonishing. Birmingham and Chattanooga are so well known that it is almost needless to mention their history. Anniston, which in 1880 had probably 1,200 inhabitants, has now about 12,000, and claims to have more capital invested in its manufacturing, mining and kindred industries than the whole State of Alabama had in manufactures in 1880. Bessemer, which had no existence prior to 1887, now has several million dollars invested in furnaces, rolling mills and kindred enterprises, with 4,000 people living where a forest stood in 1887. Sheffield was a cotton field in 1885; its five furnaces alone can now furnish nearly as much freight in tons to the railroads as the cotton crop of the entire South. Roanoke, with its 17,000 people, was Big Lick with 300 inhabitants eight years ago.

Two years ago Florence, Ala., was one of the most attractive towns in the South as a place of residence; visitors grew enthusiastic over it, and its inhabitants, who numbered about 2,000, thought that no place in America equaled it for attractiveness; but it was simply a beautiful town, and few then looked upon it as destined to be a great city. Its history for eighteen months tells the story of the South's possibilities. A year and a half ago a few energetic Southerners, charmed with it as a place of residence, and realizing its unsurpassed advantages for the manufacture of iron, and the products of iron, cotton and wood, undertook the work of building a manufacturing city. In the short time that has elapsed they have secured the establishment of thirty or more new enterprises, which have an aggregate cash capital of several million dollars. Nearly all are in operation, and the buildings for the rest are under construction. There are two furnaces (one now in blast), a \$100,000 wagon factory, a \$300,000 hardware factory, and two cotton mills (one in operation and one to cost \$500,000 under construction), and other factories large and small, including a \$300,000 rolling mill, are to be built at once. These enterprises will employ over 6,000 hands. This has all been done without any real estate speculation; there has been no unhealthy "booming," but simply energetic work on the part of a few people, and from 2,000 its population has increased to probably 10,000, with still more rapid growth in the future now assured. Florence is to be commended for the successful efforts made to secure diversity in its manufactures. In this respect its growth has been remarkable. Instead of centering all attention upon cotton or iron, it has sought to establish a wide range of industries, including almost every line of manufacture from the making of paper-boxes or suspenders to the production of pig iron. In this respect it is in advance of any

\* These figures are for 1888 instead of 1889, as it was found to be impossible to induce the State authorities to take the trouble to furnish the assessed value of property in that State for each year since 1880 to 1889. It is but due to the MANUFACTURERS' RECORD to say that persistent efforts were made to gain this information and that the letters were referred back and forth between the Governor and the Auditor until it was decided by the latter that it would be too much trouble to furnish these figures. Comment is unnecessary.

other Southern locality. This illustrates what the South can do, and is but a sample of what other places are doing and will do in the future.

Less than a year ago Fort Payne was an unknown country village. New Englanders took hold of it, and inside of that brief period have invested several million dollars there in building an industrial town. Several thousand busy, progressive people, mainly New Englanders, are vigorously pushing Fort Payne to a leading position among the industrial cities of the South.

Six months ago the name of Middlesborough, Ky., could not have been found upon even the latest railroad maps. It was known to a comparatively few as the place which English capitalists, including many of the foremost iron and steel makers of Great Britain, had selected as the site for building a city on a very broad basis, backed by an apparently unlimited supply of money. Of its advantageous location at Cumberland Gap, where railroads must of necessity meet, and where minerals and timber are in sufficient quantity to supply the most extensive demands of the future, it is needless to speak. Within the last three or four months these facts have been given such wide publicity that they are already well known. Suffice it to say, that for several years these English capitalists had been quietly, but vigorously, at work. Their experts had thoroughly explored the mineral and timber resources of the surrounding country, and over 60,000 acres of picked lands had been purchased. Every arrangement had been made for the establishment of gigantic enterprises before a railroad had reached the place, and before much publicity had been made of their plans regarding the building of a city. Where less than twenty-five people lived half a year ago, there are now, it is estimated, fully 4,000, and Middlesborough is growing as few towns have ever grown. Like Florence, Fort Payne, Anniston, and other Southern towns that have grown so rapidly, Middlesborough's progress is solid and substantial, founded upon the utilization of the unlimited stores of coal and iron, and the great forests of virgin timber tributary to that place. Fully \$10,000,000 have already been invested in the work so far accomplished in the building of railroads, and in the establishment of many and varied industries. Middlesborough is but the visible sign of the faith which the foremost iron and steel makers of England have in the possibilities of cheap iron and steel production in the most favored sections of the South.

Florence, the development of which has been mainly in the hands of Southern men, though Northern capitalists have recently invested over a million dollars there; Fort Payne, "The New England City of the South," which is wholly the work of New England men and money, and Middlesborough, which is the offspring of English capital and brains, but which is now receiving a full measure of American energy and wealth, are three types of the combined forces that are now at work in the South. As such, their progress is of peculiar interest.

## THE IRON INTERESTS OF THE SOUTH.

### Rapid Growth Based on Solid Foundation.

#### THE MANUFACTURE OF BESSEMER IRON AND STEEL.

The growth in the manufacture of iron in the South during the last few years has been so rapid as to attract universal attention. While other industries have made astounding advances, the iron business has commanded the widest attention, and has been more generally discussed than any other industry. This is not surprising, when it is remembered that it was but a few years ago that the iron makers of the North ridiculed, first, the possibility that the South could ever become a large iron producer, and when this fallacy was overthrown, then the idea that the South would become a serious competitor with Pennsylvania in the iron trade of the country was persistently claimed to be absurd.

During the severe depression in the iron business in 1884 and 1885, when many Northern furnaces were compelled to go out of blast, because they could not make iron and sell it at the prices then ruling, without a heavy loss, Alabama and Virginia furnaces commenced to invade Eastern markets more freely than ever before. It is of more than passing interest to note that the South's pig iron production attracts the greatest attention during periods of severe depression and low prices. The fact that Southern furnaces continue to run through such periods, and even to make money, while so many Northern furnaces are forced to blow out, is an argument to which there is no reply. The South's percentage of the total production of pig iron is greater during years of dullness than in active times, and this is the best of all tests, for when business is brisk and prices high, nearly all furnaces, even though many may be badly located, can continue in operation. This point was illustrated during the depression of 1884-85. In 1880, the South made 397,301 tons of pig iron; in 1885, it made 712,835 tons—a gain of 315,534 tons. Three States—Virginia, Alabama, and Tennessee—which, in 1880, produced 178,006 tons of pig iron, in 1885, produced 552,419 tons—an increase of 374,413 tons, or 139,958 tons more than the net increase in the United States, the production in the whole country outside of these three States being 234,455 tons less in 1885 than in 1880. This condition of affairs was in part repeated during 1888. The extremely low prices then prevailing caused the blowing out of many Northern furnaces, while Southern furnaces were pushed to their utmost capacity, new ones blowing in as fast as com-

pleted; and out of the profits made during even the dull times of 1887 and 1888 a number of other furnaces are to be built.

In 1884-85, when the shipments of Southern iron to Eastern markets first commenced to attract much attention, but few Northern iron makers believed it possible for Southern furnaces to ship their iron East, paying from \$3 to \$5 per ton freight, with any profit, and it was repeatedly stated that it was only a question of time how long they could stand what was said to be a heavy loss on every ton thus shipped. Month after month passed by, and Southern furnaces, instead of failing, continued to present every evidence of prosperity, while the men who had had the longest experience in the business, and who it was said must be losing money, went on increasing their production by building new furnaces. This was a phase of the matter which the skeptics could not quite understand, but still they were not fully converted, and various excuses were found to account for the new furnace projects. For a while they credited them to "land speculations," "corner lots," "town booming," and such things, declaring that it was a great bubble which would soon be pricked. About that time, Mr. Samuel Thomas, of the Thomas Iron Company, of Pennsylvania, which is usually supposed to virtually control prices on all Pennsylvania iron, so extensive are its operations, after carefully investigating for himself the resources of Alabama, commenced the erection in that State of one of the finest furnace plants in America. And now, after proving by actual work the profits of iron making there, he is building another furnace and an immense rolling mill, and rumor (which in this case is doubtless correct) says that he will build still other furnaces until his Alabama plant is one of the largest in America. His locating in Alabama was an argument against which the Northern skeptics could bring nothing. The fact that the leading iron maker of Pennsylvania, after close investigation, was willing to back his judgment as to the future of Alabama iron, to the extent of a million dollars, convinced the iron men of the North that it would be folly to attempt to ignore the possibilities of the South in this direction any longer.

The development of the South's iron interests has not been confined simply to the making of pig iron. Not content to make pig iron alone, to be shipped North and there turned into the finished product and reshipped South in the shape of stoves, agricultural implements, car wheels, iron pipe, and the thousand and one other articles into the manufacture of which pig iron enters, the South is very wisely diversifying its industries by preparing to consume at home the product of its own furnaces, and so great is the progress in this direction that it is already producing almost every variety of goods from pins and tacks to locomotives. The double freight and the attendant expenses are thus saved, while southern labor receives the benefit of the work afforded in these varied industries. A large amount of Southern iron will continue to find a market in New York, Pennsylvania and other Eastern States, as well as in the West, and transportation companies will continue to increase their facilities for this business. But while this is true, there will be an ever increasing home consumption of iron. Rolling mills, pipe works, car wheel and axle works, foundries and machine shops, are multiplying so rapidly that instead of the South being dependent upon other sections for the product of such works, it will soon invade the North and West, not simply with pig iron, but with the finished goods.

According to the United States census report of 1880 on iron and steel manufacture, prepared by Mr. James M. Swank, secretary of the American Iron and Steel Association, and a noted expert, "the average distance over which all the domestic iron ore which is consumed in the blast furnaces of the United States is transported is not less than 400 miles, and the average distance over which the fuel which is used to smelt it is transported is not less than 200 miles. From the ore mines of Lake Superior to the coal of Pennsylvania is one thousand miles. Connellsville coke is taken 600 miles to the blast furnaces of Chicago and 750 miles to the blast furnaces of St. Louis." About one million tons of ore are now annually imported at Baltimore and Philadelphia from Spain, Africa, the Island of Elba and Cuba, and shipped hundreds of miles into the interior to the furnaces of Pennsylvania.

Against this long transportation of ore and fuel to Northern furnaces averaging 400 and 200 miles respectively, with the heavy freight attendant upon it, the furnaces of the South have the advantage of ore, coal and limestone almost at their very doors, and in such close proximity that these three materials can truthfully be said to be side by side. There is no expensive transportation to bring them together at the furnace, for nature has seemingly done her best for this favored territory, as though she intended that here should be the most advantageous point in all the world for the production of pig iron.

In many places in the iron regions of the South the furnaces are literally surrounded by inexhaustible supplies of ore, coal and limestone, the transportation in some cases being but a few hundred yards. This point is enforced in a letter from Mr. R. W. Raymond, a well-known mining engineer and secretary of the American Institute of Mining Engineers. After investigating the advantages of the Birmingham district, Mr. Raymond wrote:

"Those who had not previously visited the district were impressed with its remarkable advantages for the production of cheap iron. The ore, coking coal and excellent limestone are in contiguity, and it is figured that the total cost of material at furnace in the Birmingham district will average about \$1.12½ per ton of iron produced, as against \$4 and \$5 in the Lehigh and Schuylkill valleys."

Here is an admitted difference of between nearly \$3 and \$4 a ton, and in many cases the margin is still wider.

As to the cost per ton of iron making in the South, there are so many contingencies to be taken into account that exact figures cannot be given, and the writer prefers not to

use Southern estimates, which might be charged with being biased, but to take the testimony of Northern experts. Conservative authorities have put the average as at least \$5 less than the average in Pennsylvania. Mr. R. P. Rothwell, C. E. M. E., of New York, editor of the Engineering and Mining Journal, a high authority in metallurgical matters, after a close personal investigation, estimated that the total cost of making iron in certain parts of Alabama, exclusive of interest on capital or profit on mining would be about \$8.30, and even this he said had been "bettered," and enough had been done to show that iron could be made there at a figure not exceeding \$8 a ton, every expense included. In Mr. Rothwell's estimate he allowed for 1¼ tons of coke at \$2 a ton or \$3.50 for fuel, but since then it has been demonstrated by actual furnace work that it is possible for one ton of coke to produce a ton of iron, a saving the importance of which can be readily understood, but even if this should not prove possible at all furnaces or on an average, it is undoubtedly true that a considerable reduction can be made from the 1¼-ton estimate.

The Iron Age, the standard Northern authority on iron matters, a year ago, after its editor had spent some time in Alabama, admitted that iron is made there as low as \$10.50 to \$11 a ton, "including fair allowances for interest on plant, a moderate royalty charge on ore and coal for exhaustion of lands, and a safe margin for ordinary repairs, replacement, taxes and cost of water. "Accepting," says the Age, "the higher figure, and making allowances for freights, commissions and insurance, we find that the furnace men of the Birmingham district can lay down their iron for the average of the grades without suffering any pressure at \$15.75 to \$16 at New York; at \$16 to \$16.50 at New England points and at \$15.50 to \$16 at Cincinnati. Some of them can do it more cheaply, but at the figures named, with plants run fairly well and producing about 2,000 to 2,200 tons a month, as the majority of them do, the makers in the district would meet the market without suffering. In other words, when standard irons are selling at tide-water at \$15.50, \$16.50 and \$17.50 respectively for gray forges, No. 2 and No. 1 Southern irons could still hold their own." And then, after contrasting some of the advantages of the two sections, the Age closes with the following very strong statement: "But dealing with the industry as it exists to-day, a candid survey of the situation will lead to the admission that if it should come to a struggle between the furnaces in eastern Pennsylvania, New Jersey and New York, which produce chiefly foundry brands for the open market, and the makers of the South no inconsiderable number of the former would be unable to survive very long."

Mr. Andrew Carnegie, the leading iron and steel maker of America, after his visit to the South last winter wrote a letter to the MANUFACTURERS' RECORD, in which he said of Alabama furnaces: "\$10 per ton cost for their foundry iron is a liberal estimate with good management, and for a series of years some of the best located and best managed furnaces may be able to do even better than this figure. But as far as I could see, the average cost of the district must be in the neighborhood of \$10, everything counted. The ability to manufacture at this price must give the Southern manufacturers a large market for their pig iron. When the next stage comes, and they seek to manufacture the pig iron into more advanced forms, I believe it will be done by converting pig into steel by means of Bessemer and open hearth basic processes." This admission that the "average cost, everything counted," is about \$10 a ton for foundry iron, will undoubtedly carry great weight, but there are furnaces in Alabama which make iron at probably not over \$8.50 a ton.

In the early part of 1889, Mr. Abram S. Hewitt visited the South and expressed himself very freely and very enthusiastically over the future of its iron interests, and in an interview published in England during his visit there, said that it was possible to make iron in the South at \$7.50 a ton.

In writing of the South's iron interests a few years ago, Col. A. K. McClure, of Philadelphia, said: \* \* \* "It is idle for Pennsylvania and other great iron and coal-producing States to close their eyes to the fact that we have reached the beginning of a great revolution in those products. No legislation, no sound public policy, no sentiment can halt such a revolution when the immutable laws of trade command it; and the sudden tread of the hordes from the Northern forest upon ancient Rome did not more suddenly threaten the majesty of the mistress of the world than does the tread of the iron and coal diggers of Alabama threaten the majesty of the Northern iron and coal fields. \* \* \* These lessons come upon us plain as the noon-day sun, and it is mid-summer madness not to read them understandingly. We cannot war with destiny; we cannot efface the beneficent gifts of Him who leads the waters to the sea and sends them back in the dews and rains of Heaven. Alabama has been gifted far beyond even our boasted empire of Pennsylvania, and only the Southern sluggard has hitherto given the race to the North. Now there is a new South, with new teachings, new opportunities, new energies, and manifestly a new destiny, and the time is at hand when a large portion of the great iron and coal products of the country which enter competing centres will be supplied cheaper from Alabama than from any State in the North. How Pennsylvania will solve the problem I do not assume to decide, but the logical result would be the transfer of the portion of the iron industry that can best prosper here (in the South) from the North to the South, just as the spinning and weaving of the home consumption of cotton must soon come to the cotton fields, and the better water-power and climate which they furnish."

The iron-makers of the South having established this industry upon such a broad and solid basis as to fully convince the entire business world of its permanency and magnitude, have for many months been devoting very close study to the opportunities for steel-making. They are not content to confine their operations to producing pig iron and leave to the North and the West the more desirable business of manufacturing steel.



For a while it was claimed that the South had no ores suitable for making Bessemer iron and steel, and would only be able to engage in the manufacture of basic steel. Recent events have proved that this is a mistake. There are practically unlimited supplies of high-grade Bessemer ores in different parts of the South, and arrangements have lately been matured for utilizing them on a large scale. The first company actively organized to build a Bessemer plant South of Maryland was the North Carolina Steel & Iron Co., which was formed on November 30th, of this year, with a capital stock of \$1,000,000. This company is composed of a number of leading capitalists, and some prominent officers in Southern railroads. It purchased the celebrated Ore Hill property, forty miles south of Greensboro, N. C., and other Bessemer properties, besides two thousand acres of land at Greensboro, and at this place will, it is stated, build a 150-ton furnace to make Bessemer iron, and follow that with a steel rail mill, rolling mill, &c. Greensboro will thus doubtless be the first point in the South to have in operation a full plant of this character, though a Talladega (Ala.) furnace has lately been very successful in making Bessemer iron from selected local ores.

While greater attention has been attracted to the iron interests of Alabama than to those of any other Southern State, so much so that Alabama has steadily boasted that it could produce iron at a lower cost than any other section of the country, it is probable that there are favored points in other Southern States that can make iron as cheaply as the most favored spot in Alabama. In Western North Carolina, East Tennessee, Southwest Virginia and Southeastern Kentucky there are iron ores sufficient in quantity and quality to meet the requirements of the most exacting furnaceman. At many points the ores are of very high grade, suitable for Bessemer iron, and the ease and cheapness of mining them, and their proximity to the best coking coal fields in the country, the Cumberland Gap and Pocahontas regions, unite to make it possible to produce Bessemer iron at a price that will mean as great a revolution in the steel trade of the country as the development of Birmingham's iron interests effected in the pig iron trade. It is probably in this territory that the most marked activity will be seen in iron and steel matters during the next few years. The investigations of American and English experts opened the eyes of the country to the advantages possessed by Middlesborough, Ky., on the western side of this territory, for iron and steel making based on the abundance of high-grade ores within a few miles of the great coking coal districts of Southeastern Kentucky and Southwestern Virginia. It is doubtful if any other town in America has ever made such wonderful advancement in six months as this town of Middlesborough, where coal, iron and steel enterprises of enormous magnitude are rapidly being centered. Following this is the Greensboro Bessemer enterprise at the eastern side of this same field. Experts who have investigated the properties owned by the Greensboro people, and who know every requirement of iron-making, claim that Bessemer iron can be produced there at a cost of \$8 a ton. Ores analyzing 55 to 60 per cent. of iron, and almost free of phosphorus, can, it is said, be delivered to the furnace at not over \$1 a ton.

In Llano county, Texas, there is Bessemer ore of remarkably high quality, analyzing in some cases 70 and 71 per cent. metallic iron. Investigations have been in progress for some time to determine the quantity, and if the final reports are as favorable as the first reports made by good authorities as to the quantity very extensive operations will be commenced for mining and shipping the ore, and also for converting it into iron and steel both at Llano and Denison. Members of the Standard Oil Company have been making careful investigations in this section, having in view the erection of large steel works at Denison, good coking coal being found near that town.

The development of the coal, iron and steel interests of Carolina, Virginia and Kentucky will in no way hurt Alabama or retard its growth, except by drawing some of the capital and energy that otherwise might seek the latter State. There is room enough for a rapid progress of all parts of the South, as shown elsewhere in this paper.

The production of pig iron in net tons in the South for each year from 1880 to 1888 according to the official report of the American Iron and Steel Association was as follows:

STATES.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Maryland.....	61,437	48,756	54,524	49,153	27,342	17,399	30,502	37,427	17,606
Virginia.....	29,934	83,711	87,731	152,907	157,483	163,782	156,259	175,715	197,396
North Carolina.....	.....	800	1,150	.....	435	1,790	2,200	3,640	2,400
Georgia.....	27,321	37,494	42,364	45,364	42,685	32,924	46,490	40,947	39,397
Alabama.....	77,190	98,081	112,765	174,465	189,664	227,438	283,859	292,762	449,492
Texas.....	3,500	3,000	1,321	2,381	5,140	1,843	3,250	4,383	.....
West Virginia.....	70,338	66,409	73,220	88,398	55,231	69,007	98,618	82,311	95,259
Kentucky.....	57,708	45,973	66,522	54,629	45,052	37,553	54,844	41,907	56,790
Tennessee.....	70,873	87,406	137,602	133,963	134,597	161,199	199,166	250,344	267,931
Total for Southern States	397,301	451,540	577,275	699,260	657,599	712,835	875,179	929,436	1,132,858
Total for Whole Country	4,295,414	4,641,564	5,178,122	5,146,972	4,589,613	4,529,869	6,365,328	7,187,206	7,269,628

The most striking fact in connection with the output of iron in the two sections is brought out by comparing the production of 1887 and 1888, two years of dullness in the iron trade, and as already said, it is during such periods as these that the South's advantages are the more fully brought out. In 1887 the South produced 929,436 tons of iron, and in 1888 1,132,858 tons, a gain of 203,422 tons, while the North, which made 6,257,770 tons in 1887, made 6,136,770 tons in 1888, a decrease of 121,000 tons. Presented in tabular form this makes the following showing:

	1887 tons.	1888 tons.	
Production of Iron in the South.....	929,436	1,132,858	Increase, 203,422
In the rest of the country.....	6,257,770	6,136,770	Decrease, 121,000

As suggestive as these figures are, the margin of difference in the amount of iron produced in the two sections will rapidly narrow, as year after year the South, which is just on the threshold of its iron development, increases the number of its furnaces, while in the North many old furnaces are being abandoned and comparatively few new

ones are being built. A large number of new Southern furnaces have gone into blast during the last few months and many others will blow in during the coming twelve months, so that a conservative estimate would place the probable production of iron in the South during the present year at about 500,000 tons more than in 1888, or a total of from 1,600,000 to 1,700,000 tons, and in 1890 at considerably over 2,000,000 tons. There are now under contract to be built and under construction in the South about 30 furnaces. As nearly all of them are large they will average over 100 tons capacity a day or an aggregate capacity of over 1,000,000 tons a year.

That the full importance of the traffic which this iron business will afford to Southern railroads and its influence upon railroad construction in that section may be appreciated, some comparative statistics will best indicate its volume. In making iron, the railroads handle about  $5\frac{1}{2}$  tons of freight, including the ore, coke and limestone carried to the furnace and the iron hauled away, for every ton of iron produced. On the basis of this exhibit 2,000,000 tons of iron, which is probably less than what the South's output in 1890 will be, would furnish 11,000,000 tons of freight, not counting any of the indirect traffic that would necessarily be developed by the growth of this business. This 11,000,000 tons would mean 550,000 carloads of 40,000 pounds each. It would mean a traffic more than six times as great in the number of tons as the entire cotton crop of the South, estimating that at 7,000,000 bales and 500 pounds to a bale. The influence of the wheat crop upon the railroads of the country is very sensibly felt, and especially in Wall street, where prices of railroad stocks constantly turn on the preliminary estimates as to the probable yield, and yet 400,000,000 bushels of wheat, which is but little short of the crop of 1888 for the entire country, would be only 12,000,000 tons, or but 1,000,000 tons more than the tonnage of the South's estimated iron business of next year. The immensity of 11,000,000 tons of freight cannot probably be more forcibly impressed upon the mind than by the mere statement that if it were to be shipped by water its transportation would furnish 3,000 ton cargoes to over 3,600 ocean steamships.

It has already been said that the South is building factories and shops of various sorts so rapidly that the consumption of pig iron there will be very greatly increased. This point is scarcely appreciated by the Northern people, who have heard so much about new furnaces that they have overlooked the new rolling mills, car works, pipe works, stove foundries, machine works, agricultural implement factories and kindred enterprises. Comparatively few outside of Virginia know that in Roanoke, a town which was but a small way-station five or six years ago, there are car and locomotive works which employ 1,000 hands, and which not only build rolling stock for Southern roads, but compete with Northern works for furnishing cars to Northern railroads, and that Richmond has locomotive building works which cost \$800,000 to construct and equip. As we go South other enterprises of fully as great magnitude are found in a number of places which have grown up since the development of the iron trade commenced. In the older places, such as Richmond, Louisville, Knoxville, Nashville, Chattanooga, Memphis, and many others, there are many iron industries, the trade of which is steadily expanding. These are already known. When we come to the newer towns, the ones that have attracted the greatest attention as builders of new furnaces, the magnitude of the diversified iron enterprises is seen. Birmingham's rolling mills have pushed their product even into the Chicago market; its stove works have furnished stoves to Mexico; its pin and tack factory ships its goods in all directions, while car works and machine shops help to swell the home consumption of the iron which its many furnaces produce. With the building of the first two furnaces at Bessemer, one of the finest rolling mills in the country was also constructed, so that when the furnaces went into blast the rolling mills were about ready to start up. In Anniston the diversity of the South's iron development is admirably illustrated. The largest consumers of iron there are the pipe works, claimed to be the most extensive in the world, which have a capacity of 250 tons of iron a day, a million dollar car plant, with a capacity of about 20 complete cars a day, which includes two immense foundries for castings, a rolling mill, car-wheel and axle works and machine shops. This rapidly increasing diversity of Southern industrial growth is seen from Maryland to Texas, and is being forcibly illustrated in Birmingham, in Chattanooga, in Atlanta, in Florence, in Roanoke, in Anniston, in Middlesborough, and elsewhere.

It is not a one-sided and hence an unstable growth, but is a well-rounded development, covering every phase of this great industry, from the mining of the ore to its conversion into the pig iron, and thence through all stages of progress until it is turned out as the finished product. The far-reaching influence which this rapidly growing industry must inevitably exert upon all the business interests—railroad, financial, commercial and industrial—of the entire country must command thoughtful study. It is not within the scope of this article to attempt to portray that. The aim of the writer has been simply to present in as brief a manner as possible the most striking features of the South's iron industry, to show on what its growth is based, the profitableness of the business when well managed, and the magnitude which it is now assuming as the fires of one great furnace after another are lighted.

## THE RAPID INCREASE IN COAL MINING.

The magnitude of the wealth of the South in coal is beyond computation. The entire coal area of Great Britain covers 11,900 square miles, while West Virginia alone has 16,000 square miles of coal fields, Alabama, 10,680 square miles; Kentucky, nearly 13,000; Tennessee, 5,100; Arkansas, over 9,000, and Texas estimated

at over 30,000 square miles. Moreover, the coal is easily and cheaply mined, and is, as to much of it, of the best quality. Some idea of how nearly inexhaustible are the coal beds of the South, may be gained from a few statistics regarding the Warrior coal fields of Alabama, which is simply one of the coal fields of one State. Regarding the Warrior field, Prof. Henry McCally, in his late geological report, says that it "contains about 7,800 square miles, and is about two-thirds as large as the entire coal territory of Great Britain. Its coal measures are over 3,000 feet thick, containing fifty three seams of coal, being from a few inches to fourteen feet thick, having a combined thickness of over 125 feet of pure coal. It is estimated that they contain not less than 113,119,000,000 tons, of which about 108,394,000,000 tons would be available. The coal is valued now at about \$150,000,000,000 at the mine, of which \$30,000,000,000 would be profit, being about 200 times the present total assessed value of the property in Alabama, and would buy every foot of Alabama territory at \$900 per acre. These coals, like those of other fields in Alabama, are especially enhanced in value, owing to the proximity of vast deposits of red and brown iron ores and lime stones."

No where else, so far as is known, are the coal fields so admirably located in relation to iron ore, to the best markets and as regards the ease and cheapness of mining, as in the South. The mineral belt, which extends from Wheeling, W. Va., to North Alabama, has greater undeveloped wealth and a great combination of advantages and possibilities of development than any other area of equal extent in the world. As rapid as has been the expansion of the coal mining industry of this section, it is but in its incipency, and of very small proportions compared with what will be seen within the next five or ten years. The production of coal in each Southern State, in 1880, 1882, 1887 and 1888, was as follows:

	1880.	1882.	1887.	1888.
Maryland.....	2,228,917	1,294,316	3,275,023	3,479,470
Virginia .....	45,896	100,000	825,263	1,073,000
West Virginia.....	1,839,845	2,000,000	4,836,820	5,498,800
Georgia.....	154,644	175,000	313,715	230,000
Alabama.....	323,972	800,000	1,900,000	2,900,000
Tennessee.....	495,131	850,000	1,900,000	1,967,000
Arkansas.....	14,778	50,000	150,000	193,000
Texas.....	.....	.....	75,000	90,000
Kentucky.....	946,288	1,300,000	1,933,185	2,570,270
Total.....	6,049,471	6,569,316	15,212,006	18,001,270

In 1882, the South produced 6,569,316 tons of coal, and in 1888, 18,001,270 tons, and the output for 1889 will probably be at least 22,000,000 tons. Thus, in 6 years, from 1882 to 1888, the output of Southern coal mines advanced from 6,500,000 tons to upwards of 18,000,000 tons, and before the end of 1890 the South will be producing at the rate of 25,000,000 tons or more a year. Or, in other words, between the taking of the census of 1880 and that of 1890, the output of Southern coal mines will have more than quadrupled, and every year will then show continued gains as to the development of this territory is yet but in its infancy.

In Southwest Virginia, in West Virginia, and in South Eastern Kentucky, the abundance of coking coals of superior quality has caused an almost unprecedented activity in the mining and coke making interests of that section.

Some idea of the extent of the operations that are being carried on in this district may be gained from the fact that the American Association, Limited, which owns about 60,000 acres of coal lands in the neighborhood of the new town of Middlesborough, Ky., has within the last twelve months made leases of coal properties for mining, to fourteen different operators. It is estimated that these mines alone will put out 1,500,000 tons of coal within eighteen months. Many new mines besides these on the American Association's lands are being opened in the same part of Kentucky, and in Virginia and West Virginia, there is similar activity. In Alabama, the demand for coal exceeds the output, notwithstanding the rapid increase in the production, and extensive arrangements are in progress for increasing the capacity of mines now in operation and for opening new mines.

## THE UNLIMITED POSSIBILITIES OF DEVELOPMENT IN THE SOUTH.

The industrial advancement of the South during the last few years has been so rapid that many people, who have failed to appreciate the magnitude of the natural resources on which this progress is based, wrongly imagine that this development must in a few years reach its limit. They cannot comprehend because they have not studied the subject that the South's growth can go on indefinitely and yet the limit be not reached.

This point can probably be best illustrated by taking one State, Alabama, for instance, as a type of the South, and comparing it with Pennsylvania, the typical wealthy State of the North, combining enormous industrial and agricultural prosperity. If it can be shown that Alabama in itself has greater possibilities than Pennsylvania, and is destined in time to surpass the latter in industrial and agricultural wealth, it will be readily admitted that the former has as yet scarcely laid the foundation of its industrial structure. This can be better understood when it is remembered that in 1880 the value of the manufactured products of Pennsylvania was \$744,818,445, or nearly \$300,000,000 greater than the combined values of the manufactured products of the entire fourteen Southern States in that year, and 57 times greater than the value of Alabama's manufactured products in the same year. In other words, against Pennsylvania's \$744,000,000, Alabama had less than \$14,000,000 as the value of her manufactured products in 1880.

The assessed value of personal property and real estate in Pennsylvania in 1880 was \$1,683,450,016, against \$122,863,228 in Alabama. In 1880 Alabama had a population of 1,262,344, while Pennsylvania had 4,282,891; Alabama had 2,070 manufacturing establishments and Pennsylvania 31,225; Alabama had only four towns or cities having a population of over 4,000, while Pennsylvania had fifty-six.

These statistics show what great progress Alabama must make before she attains even unto Pennsylvania's wealth and population in 1880. To do this she must nearly quadruple her population; increase the capital invested in manufactures from \$9,600,000 in 1880 to Pennsylvania's \$475,000,000; the value of the products of her factories from \$14,000,000 to \$744,800,000; the value of her assessable property from \$122,000,000 to \$1,680,000,000; the number of her factories from 2,000 to 31,000, and her present railroad mileage from 3,000 miles to Pennsylvania's 7,445 miles.

Doubtless many will say that all this is impossible, and that Alabama can never reach Pennsylvania's material greatness. This is not, however to show that Alabama will overtake and surpass Pennsylvania, for the latter State is still pressing forward in development, though even this may be done, but is simply designed to show what immense strides Alabama must make for years to come even to reach where Pennsylvania stood in 1880.

Can this be done? Undoubtedly. If this answer is correct then there need be no fear that Alabama (and Alabama is here used as a type of the whole South) will develop too rapidly or that the limit of her healthy progress will be reached for many generations.

Now if Alabama has greater advantages and resources of minerals, timber, soil, climate, watercourses, &c., than Pennsylvania, and if all these can be utilized to better advantage, and her minerals more easily and cheaply developed, then there is no reason why Alabama should not become as populous and as wealthy as Pennsylvania. The total area (land surface) of Alabama is 51,540 square miles, and of Pennsylvania 44,985 square miles, or a difference of 6,600 square miles in favor of the former. The timber resources of Alabama are immense. In 1880 there were 21,192,000,000 feet of standing pine, while Pennsylvania had only 1,800,000,000, or not one-tenth as much as the former State. Of Pennsylvania's timber interests the census report says: "Merchantable pine has now almost disappeared from the State, and the forests of hardwood have been either replaced by a second growth or have been so generally culled of their best trees that comparatively little valuable hardwood now remains. \* \* \* From all parts of the State manufacturers using hardwood report great deterioration and scarcity of material, and Pennsylvania must soon lose, with its rapidly disappearing forests, its position as one of the great lumber producing States."

On the contrary, Alabama, in addition to its immense pine forests, is reported as having much of its territory covered with a rich and varied forest growth of broad-leaved trees, in which oaks, hickories, ashes, walnuts and cherries abound, while there are also great regions covered with heavy forests of cypress, a very valuable timber. Alabama has the material for more than duplicating Pennsylvania's 2,800 lumber mills, with their \$21,400,000 of capital, and this will be done as the demand for lumber and woodwork generally increases.

Alabama has nearly 11,000 square miles of coal area, or nearly as much as the entire coal area of Great Britain, and but slightly less than Pennsylvania's. Her iron ore mines are absolutely inexhaustible, according to all human calculations.

Col. A. K. McClure, of Philadelphia, one of the leading men of the times, and who could not be expected to praise Alabama at the expense of his own State, was so impressed several years ago, after a careful study of the subject, with the magnitude of Alabama's mineral wealth and the cheapness of its development that he wrote a most interesting article, from which the following extract is taken, and while old to many of the regular readers of the MANUFACTURERS' RECORD, will be new to some who read this issue:

"I have studied the resources and opportunities of the State with special interest, because they are certain to revolutionize some of our chief sources of wealth in Pennsylvania, and the more they are studied the more clear it must become to every intelligent mind that England is not to-day more the rival of the Keystone State in the future production of iron and coal than is Alabama. There is not a source of mineral wealth in Pennsylvania, excepting only our oil product, that is not found in Alabama in equal or greater abundance, with the matchless advantages of climate, of easier and cheaper production, and of vastly cheaper transportation. Nature's great gifts to Pennsylvania have been not only liberally supplemented in Alabama, but to them have been added every possible natural advantage for their cheap development and delivery to the markets of the world. If half the capital and business direction that have been given to make Pennsylvania peerless in the production of mineral wealth had been given to Alabama, her productive wealth would be as great as that of the Iron State, and her population would be nearer five millions than the million and a quarter now scattered over the boundless but almost untouched riches of this sunny commonwealth."

Col. McClure very truthfully says that Alabama is the equal of Pennsylvania in forest, field and mine, and superior in climate, natural highways, and cheapness of product. There is, therefore, no reason why Alabama should not surpass Pennsylvania in wealth and population. Our readers can form some idea of how long it will require to do this even at the rate of progress that she is now making.

Alabama—and the South—can grow for generations as rapidly as they are now doing, and still the great development will not be overdone. In this illustration Alabama is contrasted with Pennsylvania, because Alabama has taken the lead in the production of iron and coal in the South, but Alabama is in no way superior in resources or in the possibilities of development to several other Southern States. Tennessee is probably richer



in coal, iron and timber; Kentucky in coal, timber and agricultural resources, and North Carolina in iron and timber than Alabama. But these States all have enough, and to spare, and it is unnecessary to point out the particular advantages of each one. The South has such a peculiar combination of advantages—coal, iron, timber, cotton, climate, healthfulness, &c.—a combination which exists no where else in the world, that it can more than duplicate the coal and iron interests of Pennsylvania, the wood-working interests of the Northwest, and the cotton manufacturing of New England.

## SOME FACTS ABOUT COTTON.

### Eight Billion Dollars Drawn to the South Since 1865 to Pay for Cotton.

Cotton is one of the most remarkable products that enters into the world's commercial and industrial interests. Its production gives the South a very great advantage over any other section of the country. Cotton is always in demand, and its consumption is steadily on the increase. The simple fact that since 1865 nearly \$8,000,000,000 have been brought into the South to pay for cotton explains in part the marvellous recuperative powers of this section since the war. While bad agricultural methods have made cotton raising unprofitable to many farmers, yet there is no question but that cotton is one of the most profitable crops that can be raised when its cultivation is carried on intelligently on a cash basis. Southern farmers that raise their own foodstuffs, making cotton their surplus money crop, find it a very profitable one, and almost invariably become well-to-do financially.

The South produces about three-fourths of the world's annual cotton crop, but manufactures only about 7 or 8 per cent. of what it raises, the balance furnishing the material for work for millions of spindles in New England and in Europe. The total cotton crop of the world now runs from about 10,000,000 to 11,000,000 bales, of which the South raises on an average, of late years, 7,000,000 bales. Upwards of 80,000,000 spindles are in operation in the world, and of this number the South has but 2,000,000, but it should be remembered that in 1880 the South had only 660,000 spindles. The increase in the number of its spindles has been surprisingly great, and the future promises still more rapid growth.

Some facts regarding the production of cotton, its value, and the amount exported, will prove of interest.

COTTON TRADE OF THE UNITED STATES SINCE 1865.

Crop years from July 1 to August 31.	Acreage.	Total crop, bales.	Total value.	Consumption in U.S. bales.	Foreign Exports, bales.	Value of Exports.
1865-1866.....	.....	2,269,316	\$432,331,139	666,100	1,554,664	\$281,385,233
1866-1867.....	.....	2,097,254	294,159,007	770,030	1,557,054	201,470,423
1867-1868.....	.....	2,519,554	278,618,580	906,036	1,655,816	152,820,733
1868-1869.....	.....	2,366,467	304,810,362	926,374	1,465,880	162,633,052
1869-1870.....	.....	3,122,551	326,465,391	865,160	2,206,480	227,027,624
1870-1871.....	.....	4,352,317	326,061,037	1,110,196	3,169,909	218,327,109
1871-1872.....	8,911,000	2,974,351	274,569,592	1,237,330	1,957,314	180,684,595
1872-1873.....	9,560,000	3,930,508	333,278,121	1,201,127	2,679,986	227,243,069
1873-1874.....	10,816,000	4,170,388	310,063,419	1,305,943	2,840,981	211,223,580
1874-1875.....	10,983,000	3,832,991	272,177,136	1,193,005	2,684,708	190,638,625
1875-1876.....	11,635,000	4,632,313	399,445,168	1,351,870	3,284,244	192,659,255
1876-1877.....	11,590,000	4,474,069	252,602,340	1,428,013	3,030,835	171,118,908
1877-1878.....	11,825,000	4,773,865	255,768,165	1,489,022	3,360,254	180,031,484
1878-1879.....	12,240,000	5,074,155	236,586,031	1,558,329	3,481,004	162,304,250
1879-1880.....	12,680,000	5,761,252	313,696,452	1,789,978	3,885,003	211,535,905
1880-1881.....	16,123,000	6,605,750	356,524,911	1,935,937	4,599,346	247,695,766
1881-1882.....	16,851,000	5,456,048	304,298,744	1,964,535	3,582,622	199,812,644
1882-1883.....	16,276,000	6,949,756	327,938,137	2,073,096	4,766,597	224,921,413
1883-1884.....	16,780,000	5,713,200	288,803,902	1,876,683	3,916,581	197,984,295
1884-1885.....	17,426,000	5,706,165	287,253,972	1,753,125	3,947,972	198,744,802
1885-1886.....	18,379,444	6,575,691	313,723,080	2,162,544	4,336,203	206,879,697
1886-1887.....	18,581,012	6,505,087	298,504,215	2,111,532	4,453,020	205,243,843
1887-1888.....	18,961,897	7,046,833	336,433,653	2,257,247	4,627,502	220,228,551
1888-1889.....	19,298,591	6,938,390	†390,000,000	2,314,091	4,742,347	237,775,270
1889-1890.....	.....	†7,250,000	†390,000,000	.....	.....	†250,000,000
Total.....	.....	.....	\$7,867,113,555	.....	.....	\$5,161,989,736

†Estimated.

These figures are somewhat startling in their magnitude. They show that the aggregate value of the cotton raised in the South since 1865 has been over \$7,800,000,000, and that the value of cotton exported to foreign countries during the same period has been \$5,161,000,000. The great influence which cotton has exerted upon the foreign commerce of the United States can be readily appreciated from these statistics.

It may be asked if \$7,800,000,000 of outside money has gone South since 1865 to pay for cotton, what has been accomplished, and why is the South still comparative poor? The answer is that the condition of the agricultural interests of this section after the war, due to the extreme poverty of the people at the close of that disastrous struggle, to the system of securing money in advance by mortgaging the cotton to be raised, the exorbitant rates of interest, the purchase of necessity of farm-house supplies on credit at from 75 to 80 per cent. more than cash prices, all tended to consume the entire profits on the production of cotton. Until very recently these conditions were against the raising at home of corn, bacon and other necessities, and almost the entire aggregate received for cotton went back to the North for foodstuffs. The lack of manufactures necessitated dependence upon other sections for almost every line of manufactured goods, from a pin to a locomotive. A careful student of the history of this

section will see that the South was not to blame, except to a limited extent, for this condition of affairs. Gradually the people rallied from the disasters of war and commenced the development of manufactures and the diversification of their farm products. Their "smoke house and corn crib" have ceased to be in the West, and the South is now nearly self-supporting in supplying its consumptive requirements of foodstuffs. Cotton is yearly becoming more and more a surplus crop, and the several hundred millions of dollars which it annually yields will, in the future, largely remain here for the enrichment of this section, instead of going North and West to pay for bacon, breadstuffs and manufactured goods. In this change there is a revolution in the currents of business that must produce surprising results. Added to the one or two hundred millions of dollars of cotton money that have for 25 years annually gone North, but which will now remain in the South, will be an equal, or possibly a greater amount brought to the South to pay for the iron, the lumber and the cotton goods that are now being shipped North, the millions that will come to pay for mineral and timber lands, the \$50,000,000 or more that is now paid for early vegetables and fruits, and the great aggregate, reaching probably already \$25,000,000 spent by winter visitors who come South to enjoy its climate. These facts are astounding. They can but impress anyone with the mighty change that is now being wrought out in the condition of the South.

That the South, which produces the cotton, is destined to manufacture it admits of no questioning. The South has the natural advantages necessary for success in this business, and whatever difficulties there may be in the way are easily overcome when practical experience, backed by capital, is brought to bear upon the matter. There may be times of depression, but this will not stop the sure and steady growth of this great industry. Good operatives, it has been said by some, cannot be had in the South, and this section can never hope, so some of our New England friends claim, to do anything more than manufacture coarse goods. But a few years ago the same people were just as ready to claim that cotton manufacturing, even of coarse goods, would never amount to much in the South. Forced now to admit that Southern mills control this branch of the business, they fall back on the threadbare argument against the possibility of the Southern mills ever successfully competing with New England mills on the finer goods. Before many years have passed they will be forced to abandon this. Every cotton mill that goes into operation in the South helps to make more certain the future supremacy of this section in every branch of this industry. With the increase in this business the number of trained operatives increases, and the skill necessary for the production of finer goods will be found ready at hand when the cotton manufacturers of the South decide that the time has come for devoting more attention to fine goods.

It was but a few years ago when the statement that the South would, in time, control the iron market of this country was ridiculed, and the reply made that, while the South might produce a large quantity of low grade pig iron, it could never hope to compete with the North in the finer, finished products of iron and steel, where an abundance of capital and skilled mechanics would enable that section to still control this branch of the business. At first the South demonstrated that it could make pig iron more cheaply than any other part of this country. Having done this, attention was turned to the building of enterprises for producing the finished goods, and locomotive works, car and car-wheel works, tack factories, stove foundries, hardware factories, nail mills, engine works, saw factories and hundreds of kindred enterprises are daily proving that the South can manufacture every variety of fine products requiring the highest skilled labor. As in iron, so will it be in cotton. When the time is ripe, and that time seems to be at hand, for the South to turn its attention to finer qualities of cotton goods, it will do so, and do it successfully.

In 1880 the census reported \$207,781,868 invested in cotton manufacture in the United States, and the consumption of cotton by American mills 1,570,342 bales, or much less than one-fourth of an average crop. On this basis it would require an investment of over \$800,000,000 in mills to consume our entire cotton crop; so we can form some idea of what the magnitude of the cotton manufacturing interests is. Out of an estimated total of 80,000,000 spindles in the world, the United States has only about 13,000,000, Great Britain having over one-half, or 42,000,000. The total consumption of cotton in the world is from 10,000,000 to 11,000,000 bales a year, of which the South furnishes 7,000,000 bales.

The MANUFACTURERS' RECORD lately compiled, through special reports from cotton mills in the South, a list of all the mills in that section, with the number of spindles and looms in each; and, comparing these figures with the reports of the census of 1880, we have the following interesting table, showing a most remarkable increase:

States.	No. of Mills.	No. of Spindles.	No. of Looms.	No. of Mills.	No. of Spindles.	No. of Looms.
Alabama.....	21	131,904	2,414	16	49,452	863
Arkansas.....	5	13,800	234	2	2,015	28
Florida.....	1	1,400	.....	1	816	.....
Georgia.....	73	453,998	10,346	40	198,656	4,493
Kentucky.....	6	45,300	677	3	9,023	73
Louisiana.....	5	60,880	1,584	2	6,096	120
Maryland.....	25	175,642	3,536	19	125,706	2,445
Mississippi.....	11	69,396	2,054	8	18,568	644
North Carolina.....	111	386,837	7,851	49	92,385	1,790
South Carolina.....	44	417,730	10,687	14	82,334	1,676
Tennessee.....	31	126,324	2,478	16	35,736	818
Texas.....	8	50,868	496	2	2,648	71
Virginia.....	14	99,889	2,754	8	44,340	1,322
Total.....	355	2,035,268	45,001	161	667,854	14,323

These figures show that the number of mills now in the South as compared with 1880 has doubled, while the number of spindles and looms has more than trebled, the tendency being to build mills of greater capacity than formerly. From 161 mills hav-

ing 667,854 spindles and 14,323 looms in 1880 this industry has increased until there are now 355 mills with 2,035,268 spindles and 45,001 looms in the South. As remarkable as is this increase, these figures really do not fully represent the development of this business, for they do not include the spindles and looms of many new mills now under construction, and others upon which work will shortly begin.

The foregoing table shows that Georgia leads in the number of spindles, having 455,998, while South Carolina is first in the number of looms and second in the number of spindles. South Carolina is probably making not only more rapid progress in the development of this industry than any other Southern State, but its advance in that line seems to be more evenly rounded out, and on a broader basis looking to the future. Its mills are very large, and most of them have grown to their present size from small beginnings, through wise management. They have paid good dividends for years, and steadily increased their surplus, investing it in new machinery and new mills. They have, moreover, apparently given closer study to the possibility of diversity and of the making of finer goods.

The importance of developing this industry cannot be too strongly emphasized. It keeps at home the great wealth produced in manufacturing the South's leading staple. As already shown on the basis of the capital invested and the bales of cotton consumed in American mills in 1880, an investment of \$800,000,000 would be required to manufacture the entire cotton crop of this country. Instead of selling for about \$300,000,000 a year, as the cotton crop now does, it would, if wholly manufactured in the South, represent, about \$1,000,000,000 a year. Cotton mills furnish employment to a large class of labor that must remain idle for lack of work to do, except as this business grows. In every town and city of the South there are hundreds, and in some thousands, of white women and girls anxious to work, while there is no work for them. Given employment at cotton manufacturing, in which they readily become expert, they are enabled to support themselves, and thus to add greatly to the wealth of the community. Mr. John Hill, one of the leading cotton manufacturing experts of the South has estimated that, of the operatives given employment by the establishment of a cotton mill at least 80 or 90 per cent are people who before had been unemployed, and hence had added nothing to the productive or wealth-creating power of the State. Formerly idlers—not from choice, but from force of circumstances—they cease to be a drain on others and become self-supporting. This is one of the great blessings which the growth of cotton manufacturing brings to the South.

Hon. Edward Atkinson, of Boston, the well-known political economist, in his report for the census upon the cotton manufacturing interests of the country, after showing the much greater advantages that New England possessed for this industry as compared with the most favored districts of England, wrote:

"It may be said that this proves too much and that the cotton spinners of the Southern States will have the same relative advantage over New England. Let this be freely admitted. We are treating the question of the future supremacy of the United States in the manufacture as well as the growth of cotton, and if the future changes in population, wealth and condition of the different sections of this country shall cause the increase of spindles, especially in the coarse fabrics, to be planted in the healthy hill country of Northern Georgia, Eastern Tennessee and the Carolinas, it will simply be the greater evidence that natural laws are paramount. If Georgia has twice the advantages over Lancashire that New England now possesses, it will only be the fault of the people of Georgia if they do not reap the benefit of it."

The force of Mr. Atkinson's logic will assuredly be seen in the not very distant future. Georgia, the Carolinas and Tennessee will not monopolize this industry. The whole South will share in its development, and while Georgia and the Carolinas have of late years made the greatest progress, the other states are following very fast in the same line of progress.

A leading New England cotton mill builder, Mr. C. R. Makepeace, of Providence, R. I., in a recent letter to the MANUFACTURERS' RECORD on the advantages of the South for cotton manufacturing, said:

"It is well known that the true interests of a people are best promoted when the products of their industries, either for domestic or foreign trade, are of the kind most favored by nature and produced where nature affords the greatest facilities for cheap production. It is of interest to note that the advantages claimed by the mills in the North over those in the South are precisely the same as those claimed by the mills of Great Britain over the mills of New England several years ago, but which the manufacturers of New England have proven to be untrue in the main. That Great Britain does possess some slight advantage over New England in this branch of industry is true as the North possesses certain advantages over the South and will continue to do so.

"The mills of the Southern States possess a decided advantage over the mills in the North and Great Britain in that they have the raw cotton at their doors, and that this alone represents a money value sufficient to give them control of the coarse goods has been fully demonstrated within the last ten years. This difference can be more clearly shown by the following illustration: Let us assume a 40,000 spindle mill is located at any well selected site in the cotton growing section of the Southern States. This mill, properly equipped with the latest and most approved style of machinery for the manufacture of standard 4-4 sheetings to Nos. 12 to 14 yards, would cost complete \$800,000 and would consume 20,000 bales of cotton per annum. It is variously estimated that the difference in cost of a bale of cotton—490 pounds—between the mills in Augusta, Ga., and Fall River, Mass., is from \$4 to \$6 a bale. Assume the lowest estimate of \$4 per bale and you have 20,000 x \$4 equals \$80,000 in favor of the Augusta mill, or a saving of 10 per cent on the complete cost of the mill, in cotton alone."

## IN AGRICULTURE THE SOUTH LEADS.

### A Marvellous Record of Progress Made by Southern Farmers.

The industrial development of the South has attracted so much attention that no one will question its magnitude, but there are few who realize the extent of the progress made by the agricultural interests of this section of late years. It is the combination of increasing agricultural prosperity and industrial activity which has placed the South in its present favorable financial condition. It will be well to show by statistics what the farmers have done since 1870. The production of leading crops in 1870, 1887, and 1888 in the South was:

	1870.	1887.	1888.	Increase in 1888 over 1870.
Cotton, bales .....	3,012,996	7,017,707	6,938,290	3,881,294
Corn, bushels .....	249,072,118	492,415,000	509,705,000	260,632,882
Wheat, bushels .....	33,341,340	52,384,000	44,207,000	10,365,660
Oats, bushels .....	31,973,542	81,506,000	78,254,000	46,280,458

From 3,000,000 bales of cotton in 1870, the yield in the South advanced to 7,017,000 bales in 1887, and nearly 7,000,000 bales in 1888, while the crop of 1889 is estimated at about 7,250,000 bales. Thus it has largely more than doubled its cotton crop. Better still it increased its corn production from 249,000,000 bushels in 1870 to 509,705,000 in 1888, a gain of 260,000,000 bushels, or over 105 per cent., while in the rest of the country the gain for the same period was only 75 per cent. In wheat the South's increase in 1887 over 1870 was 18,500,000 bushels, though in 1888 the gain was less because of a very short crop, and in oats the South increased from 31,970,000 bushels in 1870 to 78,254,000 in 1888, a gain of 46,280,458 bushels. It is since 1879 or 1880, however, that the South has made the most marked agricultural progress.

The yield of principal crops in the South in 1879, 1887 and 1888 was as follows:

Crops.	1879.	1887.	1888.
Cotton, bales.....	5,755,359	7,017,000	6,938,290
Corn, bushels.....	333,121,290	492,415,000	509,705,000
Wheat, bushels.....	54,476,740	52,384,000	44,207,000
Oats, bushels.....	43,476,600	81,506,000	78,254,000
Total Grain, bushels.....	431,074,630	626,305,000	632,166,000

Increase of 1888 over 1879—1,244,641 bales cotton; 201,091,370 bushels grain.

Increase of 1887 over 1879—1,261,641 bales cotton; 193,230,370 bushels grain.

These figures show an increase in the production of grain from 1879 to 1888 of over 200,000,000 bushels. How does this increase compare with the production in the rest of the country? The following figures show:

Yield in whole country, except the South.	1879.	1887.	1888.
Corn, bushels .....	1,214,780,500	963,746,000	1,478,085,000
Wheat, bushels .....	394,279,890	403,945,000	371,661,000
Oats, bushels .....	320,293,720	578,112,000	623,481,000
Total.....	1,929,354,110	1,945,803,000	2,473,227,000

While the South, as shown by the foregoing figures, made an increase from 1879 to 1887 of 195,000,000 bushels of grain, or 45 per cent., the increase in all the rest of the country for the same period was only 16,000,000 bushels, or less than one per cent. It is true that the West had a short corn crop that year, but so did Kentucky, one of the largest of the corn-producing States of the South, and moreover the West had an unusually large crop of oats, the largest, in fact, ever produced up to that time. But if we were to give the North and West the benefit of the large corn years of 1884, 1885, and 1886, and take as a comparison the average crop for 5 years, the rate of increase in grain production for the whole country, excepting the South, from 1870 to 1887, would still be only about 12 per cent., against a 45 per cent. increase in the South. In 1888 the West had phenomenally large corn and oat crops, and the increase over 1879 was very large, but the percentage of gain was only 28 per cent., while for the same time the South made an increase of 46 per cent. Thus the South, burdened by its weight of poverty entailed by the war, with a disorganized labor system, and without immigration, except to Texas, has, since 1870, considerably more than doubled its cotton and grain crops, and made, surprising as it is, a much greater percentage of increase in the production of grain since 1879 than all the rest of the country. When we consider the poverty of the South at the start, and the lack of immigration, and contrast it with the wealth of the North and West, and the tremendous immigration to the agricultural regions of the West, this agricultural progress of the South is astonishing. It is a monument to the energy of the people of this section.

A comparison of the yield of corn by States in the South in 1879 and 1888 will show how general has been the advance:

	1879. Bushels.	1888. Bushels.
Maryland.....	13,721,000	17,553,000
Virginia.....	19,957,600	34,745,000
North Carolina.....	25,678,500	28,343,000
South Carolina.....	9,702,000	13,715,000
Georgia.....	20,627,400	28,069,000
Florida.....	1,945,650	4,541,000
Alabama.....	25,403,300	31,616,000
Mississippi.....	24,926,400	28,422,000
Louisiana.....	12,592,500	15,263,000
Texas.....	29,198,000	92,436,000
Arkansas.....	22,432,800	41,543,000
Tennessee.....	50,897,500	75,665,000
West Virginia.....	11,302,600	16,149,000
Kentucky.....	64,736,000	81,545,000
Total.....	333,121,290	509,705,000



A comparison of the value of live stock in the South in 1879, and on January 1, 1889, will prove of interest:

	1879.	1889.
Horses.....	\$127,502,759	\$168,082,001
Mules.....	65,059,675	117,178,894
Milch cows.....	47,630,990	69,515,924
Oxen and other cattle.....	87,019,999	133,919,075
Sheep.....	19,262,888	17,239,517
Hogs.....	44,935,943	63,226,139
Total.....	\$391,412,254	\$569,161,550
Increase.....		\$177,749,296

That is a pretty healthy increase in the value of live stock between 1879 and 1889.

The total values of the chief agricultural products of the South for 1879 and 1888 (omitting sugar, rice, fruits and vegetables, &c., the value of which is not given in the United States Agricultural Department's reports) compare as follows:

	1879.	1888.
Cotton.....	\$227,893,000	\$350,000,000
Corn.....	187,958,752	205,404,000
Wheat.....	65,575,378	53,473,000
Oats.....	20,193,011	30,155,000
Potatoes, barley, hay, tobacco, &c.....	69,478,313	100,000,000
Total.....	\$571,098,454	\$739,032,000
Increase.....		\$167,933,546

If to these figures we add the increase in fruits, vegetables, &c., the total gain in the value of agricultural products of the South in 1888 over 1879 was upwards of \$200,000,000, while during the same time the increase in the value of live stock was, as has already been shown, \$177,749,000. The crops of 1889 in the South were the largest ever raised. It is estimated that the cotton yield will reach 7,250,000 bales, and this increase, in connection with the higher prices ruling, as compared with 1888, will make the value of the crop of 1889 probably \$50,000,000 more than that of 1888. Though the official figures of the corn crop of the year are not yet available, it is known that the yield was the largest on record, and estimated at 40,000,000 to 50,000,000 bushels more than the crop of 1888. Of fruits and vegetables, such crops as the South produced this year were beyond anything known before in that section, and many millions of dollars were drawn from the North and West to pay for early Southern fruits and market produce. A conservative estimate would place the aggregate value of the South's agricultural products in 1889 at not less than \$850,000,000, or more than \$100,000,000 in excess of 1888.

## RAILROADS.

### The South the Center of Activity in Railroad Building.

Although the mineral resources of the South and its vast forests have attracted widespread attention and drawn millions of dollars of capital to this section for investment, yet the development of its railroad interests has received still greater consideration and absorbed many times as much money.

"This," says a recent writer, "is the most commanding theatre of capital, and strikes the eye of the world not only for its colossal combinations of money, but the prestige of its participants. The capitalists of Europe and the United States, who have been so largely interested in building new railroads and improving old ones throughout the whole South, have added untold and innumerable momentum to the progress of that section. While they may not have led the way in starting the South on her wonderful speed of development, they have largely added to and confirmed—sealed, as it were—the confidence of the civilized world in the eligibility of the South as a field for investment and enterprise; and the South owes an immense debt of gratitude to these monetary magnates who have stamped with the golden seal of their capital the indelible impress of their confidence. The logic of confidence in the South's progress is enunciated in the golden argument of capital, and is voiced in the fierce rhetoric of thunderous and clattering railroad trains. And these roads are bands of iron to bind our union in the bonds of an indissoluble fraternity; and the cogency of common interest is added to the kindest friendship."

The magnitude of the investments made in Southern railroads since the first of January, 1880, is almost beyond comprehension. In nine years nearly 21,000 miles of new road, not counting sidings and switches, have been laid in the fourteen Southern States. This is more than the entire railroad mileage of the South in 1880. At that time the mileage was 20,612 miles, while at the end of 1889 it will be about 41,300. In nine years the gain has been over 100 per cent., while from 1880 to 1888 the gain in the whole country was only about 68 per cent.

In 1886 the South built 20 per cent. of the total new mileage of that year; in 1887 it built 23 per cent., and in 1888 35 per cent., and during 1889 nearly 50 per cent. These facts indicate how rapidly the South is gaining in railroad construction as compared with the rest of the country. That the railroad mileage of the South has made a larger percentage of gain than the West, is an astonishing fact, in view of the tremendous growth of the great West, to which the millions of foreign immigrants that have landed in this country have mainly gone. The South, with but little immigration, and not yet fully recovered from the poverty entailed by the most disastrous war in the history of the world, is making a greater rate of progress in railroad building than even the rich and powerful West. In 1880 the total mileage of the country was 98,296 miles,

and of this 20,562 miles, or 20 per cent. were in the South, while in 1888 the South had 38,251 miles out of a total of 156,081, or 24.5 per cent.

The average cost of construction and equipment is not less than \$25,000 a mile, and at this rate the 20,000 miles of new road built since January 1st, 1880, represent a cash investment of \$500,000,000.

The amount invested in building new roads is, however, but a part of the full sum expended during the last eight years in Southern railroad development. Old roads have been improved at a great outlay. Thousands of miles of iron rails have been replaced with steel, new and better bridges have been built, the rolling stock has been increased to meet the ever increasing volume of freight and passenger traffic, and other improvements made, the whole aggregating probably not far from half as much as the cost of the new roads constructed. Poor's Railroad Manual, the standard authority on such matters, gives the actual cost by States of all railroads in the country and their equipment, showing a total for the South in 1888 of over \$1,400,000,000, against \$679,000,000 in 1880, or an increase of about \$721,000,000, to which may be added \$50,000,000 or more for 1889, making the amount expended in the development of Southern railroads in the last nine years about \$800,000,000.

All indications point to the greatest activity in railroad construction in the South during the next few years that has ever been seen in this section. So great is the increase in the volume of freight, that there is scarcely a road in the South that is not blocked with business, and the double tracking of nearly all leading Southern roads is becoming a pressing necessity.

The future of Southern railroad interests is very promising. The traffic will develop faster than facilities can be provided for handling it, and the prosperity of the South means the prosperity of its railroads.

The railroad mileage by States in the South at the end of 1880 and 1888, was as follows:

States.	1880. Mileage.	1888. Mileage.
Maryland and D. C.....	1,040	1,203.06
Virginia.....	1,803	2,931.32
West Virginia.....	691	1,281.04
North Carolina.....	1,486	2,538.58
South Carolina.....	1,437	2,083.97
Georgia.....	2,439	3,938.42
Florida.....	518	2,249.78
Alabama.....	1,843	2,985.64
Mississippi.....	1,137	2,247.72
Louisiana.....	652	1,594.57
Arkansas.....	859	2,045.67
Texas.....	3,244	8,210.57
Tennessee.....	1,843	2,467.64
Kentucky.....	1,539	2,584.93
Total ..	20,562	38,252.81

Since January about 2,000 miles of new track has been laid in the South, making the total mileage of that section at present about 40,250 miles.

### Southern Men Have Led in the South's Development.

The statement of Mr. Frederic Taylor, of New York, already quoted, to the effect that the industrial advance of the South has thus far been mainly through the work of Southern people is undoubtedly true. With all due credit to the Northern men who have been active in the development of the South's resources, candor will compel any honest investigator to admit that Southern energy and enterprise mainly are entitled to the credit for what has been accomplished. Southern men led the way. Out of the darkness that enveloped this section until 1876, they blazed the path to prosperity. They built cotton mills and iron furnaces, and demonstrated the profitability of these enterprises. Southern men founded and built up Birmingham, which first opened the eyes of the world to the marvelous possibilities of this section. When they had done this, then Northern capitalists seeing the opportunities for money making turned their attention South.

The people of the South do not lack in energy or enterprise. Since the formation of this government they have demonstrated in every line of action—in political life, on the battle field, in literature, in science and in great commercial undertakings—that in any sphere of life they are the peers of the most progressive men of the world. The masses of the South have lacked opportunity; to that alone is due their seeming want of energy. The condition of the country prior to the war and for ten or fifteen years after its close made agriculture and the professions almost the only occupations for employment. The former could at the best yield but poor returns where there was no possibility of diversified agriculture in its widest sense. With no consumers for diversified farm products it would have been a waste of time to raise them. Cotton, and cotton alone, was the only crop for which a market could always be found.

The Northern farmer is enterprising. He raises fruits and vegetables and engages in dairying and kindred enterprises because he has a home market for these things. The Southern farmer had none and could not create one. He might deplore his enforced idleness when he saw his family in want, but that would not bring him buyers for his eggs or chickens or fruit when there was no one in his section to consume them. The almost unlimited amount of work for the mechanics and day laborers generally at the North enabled every man to find something to do. In the South there was almost an entire absence of work of this character. Men hung around the village stores because

there was no work to be had which would yield them any returns. With the development of manufactures there came a great change. The opportunity for work had come, and the way in which the people who had hitherto been idlers rushed to the factories, the furnaces and wherever employment could be secured demonstrated that they only needed the chance to prove their energy.

No sadder sight was ever seen than that of the tens and hundreds of thousands of Southern people, men and women, suffering in the deepest poverty which followed the war, and yet forced by circumstances beyond their power to change, to remain in idleness. It was enough to crush the life out of them. The greatest blessing that industrial activity has brought to the South is that it is daily creating new work for thousands of hitherto idle hands, and creating a home market wherever a furnace or a factory is started for all the diversified products of the farm. The latent energy of the people has been stimulated into activity, and the whole South is at work.

## A GENERAL SUMMARY.

In all other branches of manufacture the South has made equally as great progress as in the few leading ones, the statistics of the growth of which have been given. From a comparatively small business the manufacture of cotton-seed oil has become one of the most flourishing in the South, representing a cash investment of fully \$20,000,000, though the nominal capital is greatly in excess of that. In 1880 the South had forty cotton oil mills, with a capital of \$3,504,500; there are now 213 mills and over \$20,000,000 are invested in the business. The lumber industry in all its branches, from the small saw mill costing a few hundred dollars to the costly furniture factory, has grown probably more rapidly than any other line of manufacturing in the South. It is estimated by conservative authorities that upwards of \$100,000,000 have been invested in the purchase of Southern timber lands and the building of wood-working enterprises since 1880, but this is probably much too small a sum, for the sales of timber lands to Northern and Western capitalists run well up into the millions of acres every year.

The mining of phosphate rock has more than doubled, and the manufacture of fertilizers has now become a leading industry throughout the South, especially in connection with cotton-seed oil mills. Thus many millions of dollars which formerly went North for fertilizers are kept at home. The utilization of many materials which in former years were considered valueless, as the basis of important manufacturing interests, is one of the most promising indications of the South's progress.

Everywhere, and in all lines, the South is at work. Her people are imbued with a spirit of energy and enterprise never surpassed; her vast resources are being opened up, and their development is adding to the prosperity of every part of this section, and her manifold attractions and advantages are bringing a steady stream of wealth and of men of enterprise to this fair land. What the South has accomplished in the way of new industrial enterprises may be seen from the following summary of the number organized between January 1, 1886, and September 30, 1889, a little less than four years, as compiled from the weekly reports of the MANUFACTURERS' RECORD:

Iron furnace companies.....	107
Machine shops and foundries.....	416
Agricultural implement factories.....	62
Flour mills.....	489
Cotton mills.....	256
Furniture factories.....	207
Gas works.....	101
Water works.....	343
Carriage and wagon factories.....	165
Electric-light companies.....	433
Mining and quarrying enterprises.....	1,623
Lumber mills, including saw and planing mills, sash and door factories, stove factories, &c.....	2,795
Ice factories.....	372
Canning factories.....	408
Stove foundries.....	25
Brick works.....	535
Miscellaneous iron works, rolling mills, pipe works, &c.....	157
Cotton compresses.....	108
Cotton-seed oil mills.....	143
Miscellaneous enterprises, not included in foregoing.....	4,041

Total..... 12,656

Add to these figures the new enterprises organized during the last three months of 1889 and the aggregate for the four years will be about 14,000.

It may be well to sum up only a few leading points in the South's growth during the last few years, as given in the preceding pages, and thus convey some general idea of what has been done in that brief period.

In four years about 14,000 new manufacturing and mining enterprises have been organized in the South, and thousands of old plants greatly enlarged. The list of new enterprises extends over almost the whole range of human industry, embracing pig iron furnaces, foundries, machine shops, steel works, cotton and woolen mills, cotton-seed oil mills, cotton compresses, fruit canning factories, carriage and wagon factories, agricultural implement factories, flour mills, grist mills, saw mills, planing mills, sash, door and blind factories, shuttle factories, handle and spoke factories, barrel factories, shingle mills, furniture factories, tobacco factories, brick yards, ice factories, fertilizer factories, stove foundries, wire fence factories, lime works, soap factories, tanneries, glass works, gas works, distilleries, potteries, electric-light works, marble and slate quarrying companies, and companies to mine coal, iron ore, gold, silver, mica, natural gas, oils, &c.

The number of national banks has increased from 220, with a capital of \$45,408,985 in 1879, to 472, with a capital of \$76,454,510 in 1889, a more rapid percentage of gain than is shown by the rest of the country.

The railroad mileage of the South has been increased by the addition of nearly 20,000 miles since 1880. Since that year over \$800,000,000 have been spent in the building new roads and improving old ones. The assessed value of property has increased over \$1,300,000,000. This does not show the full increase in the value of property, since there is a very large amount of manufacturing property created since 1880 which does not appear in the tax assessments, being exempt by law from taxation. The increase in the true value of property was over \$3,000,000,000. In 1880 the South made 397,301 tons of pig iron; in 1888, 1,132,000, and in 1889 the output will probably be about 1,600,000 to 1,700,000 tons.

In 1880, 6,048,571 tons of coal were mined in the South, and in 1888 the output was over 18,000,000 tons. Cotton mills have increased from 161, with 14,323 looms and 667,854 spindles, in 1880, to 355 mills, with 45,001 looms and 2,035,268 spindles, while many new mills are under construction, and many old ones being enlarged. In 1880 there were 40 cotton-seed oil mills in the South, having a capital of \$3,500,000; now there are 213, with over \$20,000,000 invested.

The value of the South's agricultural products for 1888 was about \$775,000,000, and for 1889 about \$850,000,000, against \$571,000,000 in 1879. The value of the South's live stock, on January 1, 1889, was \$569,000,000, while in 1880 it was \$391,400,000. The production of grain rose from 431,074,630 bushels in 1880 to 632,166,000 bushels in 1888, an increase of over 200,000,000 bushels, while the total yield for 1889 will probably be nearly 675,000,000 bushels.

In every line of industry the same tremendous strides of progress are being made.

Presenting these comparisons in tabular form, we have the following, the figures for 1889 being partly estimated:

	1880.	1889. (Partly estimated.)
Assessed value of property.....	\$2,943,436,095	\$4,220,166,400
Railroad mileage.....	19,431	40,250
Cost of railroads.....	\$679,000,000	\$1,500,000,000
Yield of cotton, bales.....	5,755,359	7,250,000
Yield of grain, bushels.....	431,074,630	675,000,000
Number of farm animals.....	28,754,243	45,592,536
Value of live stock.....	\$391,412,254	\$569,161,550
Value of chief agricultural products.....	\$571,098,454	\$850,000,000
Coal mined, tons.....	6,049,471	22,000,000
Pig iron produced, tons.....	397,301	1,600,000
Number of cotton mills.....	161	355
"    spindles.....	667,854	2,035,268
"    looms.....	14,323	45,000
"    cotton-seed oil mills.....	40	213
Capital invested in cotton-seed oil mills.....	\$3,504,000	\$20,000,000
Number of National Banks.....	220	472
Capital of ".....	\$45,597,730	\$76,454,510

To regular readers of the MANUFACTURERS' RECORD, some of the facts and figures presented in this issue will be familiar, because week by week they have watched the growth of the South as summarized in our columns, but to many thousands who have not kept track of the South's advance, the figures which we give to-day will prove something of a revelation.

The South is growing more rapidly than the balance of the country in:

The production of pig-iron.

The manufacture of cotton goods.

The building of railroads.

The building of industrial towns and cities.

The mining of coal.

The manufacture of lumber.

The raising of grain.

The establishment of national banks.

THE South is the place for the manufacturer, because there he is nearer to the raw material, and has around him a new and ever growing market for his product; it is the place for the capitalist, because the opportunities for safe and profitable investment are such as cannot be found anywhere else; it is the place for the merchant, because the rapid increase in population and in wealth creates a constantly increasing demand for merchandise of every sort; it is the place for the farmer, because the same causes provide a continually growing market for all the products of the farm and garden.

"THE South is solid" in the determination to utilize its natural advantages, develop its resources and build up its industrial interests. The South will be in time the richest area on the globe, and its people the happiest.



# TEN YEARS OF BANKING.

## NATIONAL BANKS IN 1879 AND 1889.

### The South Leads in the Rate of Increase in National Banking.

#### Statistics that Tell of the Growth of the Business Interests of the Country.

A substantial business community must have a substantial banking system. Hence, to ascertain the stability of any community, one naturally turns to its banks first to see what their standing is.

The banking system of the United States is a remarkably sound one. It was conceived on a most comprehensive plan, and has been surrounded with safeguards and checks so that stockholders and depositors are protected as far as it lies in human possibility to do so. In every way possible it has been made to aid in the upbuilding of substantial business and commercial communities. The government has fostered and encouraged the system and leading business men have devoted time, money and energy to its development and perfection.

It is needless to go into detail as to the inception and perfection of this system. This is knowledge that falls naturally into the hands of every business man. Nor is it necessary to go into the causes that made the New England States the bankers to the rest of the country. Suffice it to say, when the system was established, the West was an almost unknown and little developed empire, while the South was prostrate and poverty stricken from the devastations of war. The North, so-called, and particularly New England, was made up of long-established communities, some of which had developed manufacturing of some sort or other, while others had become rich by trading with all corners of the globe and in prosecuting the fisheries. War had destroyed some of this commerce, but the development of the manufacturing interests more than counterbalanced this loss.

Immediately following the war came the development and settlement of the great empire of the West. Immigrants from the overcrowded shops and fields of Europe entered our ports by the thousands every week, and pushed the line of civilization westward until the Mississippi river, which a few years before was an unexplored stream, became a most familiar highway. Railroads reached out into virgin prairies, which in a night, as it were, became dotted with farming communities. More roads were built to keep up with the streams of new settlers until the Rocky mountains were reached. Here the farming communities ended, but mining communities took up the rush, and by the aid of more railways soon brought the Pacific slope into close communication with the Mississippi valley. This immense development brought increased volumes of trade to the workshops and factories of New England. Modest little industrial plants added new buildings and machinery to supply the demands of these new settlements in the West in clothing the people, extending railways and supplying agricultural and other implements and utensils. Such an enormous traffic demanded the assistance of banking institutions, and much of the heaps of wealth that this great traffic brought into New England was used to establish banks and other financial institutions, which still further aided in developing the West.

Ten years after this great empire was thrown open to the world the demand for manufactures led to the establishment of many industries nearer the field of demand, and with the increase of manufacturing came the necessity for banking institutions. The marvellous growth of the West and the multiplying of national banks there during the decade ending in 1879 does not directly concern us. But it is without a parallel in history.

Meantime, how fared the South? Recuperative nature obliterated much of the devastation of war, landowners adjusted themselves to the new system of labor, the rich natural resources of the region became known to the world, numerous industries sprang up, railroads felt their way slowly but surely through mountain defiles and over rich, rolling bottom lands, and an era of prosperity began to dawn which, now that it is fairly under way, threatens to be even more marvellous than was that in the great West.

The condition of the national banking system in 1879 well illustrates the true business situation in that year. In the whole country were 2,048 banks. Eleven hundred and sixty-six of these were in the North, which includes the New England States, New York, New Jersey, Pennsylvania and Delaware. In the West, which had at this time reached a high state of development, were 660 banks. This includes the states from Ohio on the east to Kansas and Nebraska on the west and Missouri and the Ohio river on the south. In the Southern States south of the Ohio and westward to, and including Arkansas and Texas, were 220 banks. It will thus be seen that the North had nearly twice as many banks as the West and over five times as many as the South.

The capital stock of these 1,166 banks in the North was \$321,905,255, that of the 660 banks in the West \$83,906,000 and that of the 220 banks in the South \$45,408,985. That is, the banking capital of the North was nearly four times that of the West and about eight times that of the South.

Other banking statistics for 1879 for these three sections of the country were as follows:

	Surplus.	Undivided profits.	Loans and discounts.	Individual deposits.
North .....	\$88,182,821	\$31,911,066	\$749,322,642	\$611,910,657
West .....	22,324,238	9,348,454	191,506,669	179,278,252
South .....	8,999,309	3,727,211	85,280,309	64,730,849

The North had about four times as much surplus as the West and ten times as much as the South. Of undivided profits the North had over three times as much as the West and over eight times as much as the South. Loans and discounts in the North were nearly seven times those in the West and nearly nine times those in the South. Individual deposits in the North were four times those in the West and over nine times those in the South.

Thus, when a statement of the condition of the national banks was called for on

October 2, 1879, the banks in the North had loans and discounts out to the amount of \$749,322,642, while the capital stock, surplus, individual profits and individual deposits aggregated \$1,053,909,799. The Western banks had \$191,506,669 loans and discounts as resources and \$294,856,944 of capital stock, surplus, undivided profits and individual deposits. In the South these aggregated liabilities were \$123,055,099, with loan and discount resources of \$85,280,309. The average deposits per bank in the North was about \$525,000, in the West \$272,000 and in the South \$204,000.

How do these figures compare with the statement of the national banks made up July 12, 1889? On that date there were 3,230 banks in the country, with an aggregate capital stock of \$600,851,640, an increase of 1,182 banks and of nearly \$150,000,000 in capital stock. The increase in the number of banks since 1879 had been about thirteen per cent. in the North, eighty-one per cent. in the West and one hundred and thirteen per cent. in the South, while the increase in capital stock was nearly four per cent. in the North, ninety-five per cent. in the West and seventy per cent. in the South.

Other figures for 1889 were as follows:

	Surplus.	Undivided profits.	Loans and discounts.	Individual deposits.
North .....	\$127,582,805	\$45,549,875	\$1,061,812,372	\$824,424,774
West .....	40,338,597	14,765,608	450,318,506	370,910,925
South .....	21,937,991	7,136,579	179,787,377	139,093,232

It will thus be seen that there was an increase of surplus of forty-five per cent. in the North, eighty-two per cent. in the West and one hundred and forty-six per cent. in the South; of undivided profits an increase of forty-three per cent. in the North, fifty-eight per cent. in the West and ninety-two per cent. in the South; of loans and discounts, forty-one per cent. in the North, one hundred and thirty-six per cent. in the West, and of one hundred and ten per cent. in the South; and of individual deposits, thirty-nine per cent. in the North, one hundred and seven per cent. in the West and one hundred and sixteen per cent. in the South. When it is considered that the largest dividend-paying banks in proportion to the capital are those which have accumulated the largest surplus, it will readily be seen that stock in banks in the South is fast becoming very choice investment. In 1879 the percentage of surplus in the North to the capital stock was twenty-seven per cent. and in 1889 thirty-eight per cent. In the West this percentage was about twenty-four per cent. in 1879 and the same in 1889, while in the South the percentage of surplus to capital stock was seventeen per cent. in 1879 and twenty-seven per cent. in 1889. A good increase in the surplus of a bank is as fair a sign of the kind of business it is doing as any business man could ask for, and this showing is complimentary both to the increasing business and industrial interests of the South and to the ability of the bank officials who have managed their banks with such judgment.

Following is the statement by geographical divisions:

NORTH, 1879.					
No. of banks.	State.	Capital stock.	Surplus.	Undivided profits.	Loans and discounts.
69	Maine.....	\$10,435,000	\$2,436,771	\$1,243,310	\$4,194,325
1	New Hampshire.....	5,830,000	1,080,673	503,860	7,128,575
47	Vermont.....	8,301,000	1,945,151	357,821	10,080,253
238	Massachusetts.....	45,105,000	13,613,466	3,233,454	73,313,493
51	Boston.....	50,500,000	10,616,144	2,247,975	113,176,334
6	Rhode Island.....	20,009,800	3,603,852	1,087,080	26,131,711
24	Connecticut.....	25,464,620	6,608,169	1,460,611	39,852,931
284	New York State.....	32,897,160	7,704,349	4,477,685	67,210,314
42	New York City.....	30,650,000	18,185,383	10,396,437	236,425,345
7	Albany, N. Y.....	1,800,000	1,400,000	192,785	7,388,023
66	New Jersey.....	12,995,350	3,713,671	1,389,983	26,496,480
186	Pennsylvania.....	28,945,340	7,074,001	2,547,459	47,729,538
32	Philadelphia.....	17,358,000	7,654,090	1,825,876	34,618,619
22	Pittsburg.....	9,800,000	3,071,463	618,856	19,665,846
14	Delaware.....	1,763,985	475,794	138,078	3,317,887
1166		\$321,905,255	\$88,182,821	\$31,911,066	\$749,322,642

SOUTH, 1879.					
No. of banks.	State.	Capital stock.	Surplus.	Undivided profits.	Loans and discounts.
20	Maryland.....	\$2,331,700	\$590,815	\$216,629	\$3,591,651
15	Baltimore.....	10,890,330	2,429,744	887,107	23,812,985
1	District of Columbia.....	252,000	57,000	35,265	242,447
5	Washington.....	1,125,000	273,300	81,999	1,493,726
17	Virginia.....	2,866,000	822,890	319,072	7,446,748
17	West Virginia.....	1,761,000	435,882	109,873	2,945,953
25	North Carolina.....	2,501,000	319,697	124,147	4,187,354
12	South Carolina.....	2,449,900	368,359	307,657	4,114,719
13	Georgia.....	2,221,000	431,803	179,364	3,692,306
2	Florida.....	100,000	2,000	3,455	1,26,556
9	Alabama.....	1,518,000	331,365	143,570	2,236,010
.....	Mississippi.....	.....	.....	.....	.....
.....	Louisiana.....	.....	.....	.....	.....
7	New Orleans.....	2,875,000	370,000	320,310	7,107,351
13	Texas.....	1,300,000	278,548	105,638	2,043,984
3	Arkansas.....	205,000	40,000	10,247	347,877
41	Kentucky.....	7,201,000	1,445,823	347,714	9,450,340
8	Louisville.....	2,965,500	599,964	238,257	5,887,185
23	Tennessee.....	3,005,300	555,939	306,907	6,341,165
220		\$45,507,730	\$8,999,309	\$3,727,211	\$85,280,309

WEST, 1879.					
No. of banks.	State.	Capital stock.	Surplus.	Undivided profits.	Loans and discounts.
158	Ohio.....	\$15,761,900	\$3,711,760	\$1,602,886	\$34,274,345
6	Cincinnati.....	4,100,000	895,000	666,099	12,532,029
6	Cleveland.....	3,700,000	760,000	284,586	7,505,255
92	Indiana.....	13,302,500	3,076,906	1,216,376	23,183,234
127	Illinois.....	10,714,600	3,463,483	1,254,599	22,471,899
50	Chicago.....	4,950,000	2,360,000	819,628	23,190,394
75	Michigan.....	7,235,000	1,876,122	904,809	14,091,597
4	Detroit.....	2,100,000	715,000	454,021	5,846,451
33	Wisconsin.....	2,400,000	687,872	399,196	6,004,498
3	Milwaukee.....	650,000	220,000	127,735	2,905,799
75	Iowa.....	5,867,000	1,419,101	633,491	11,667,019
30	Minnesota.....	5,150,000	937,003	452,233	12,301,167
916	Missouri.....	1,400,000	231,304	131,462	2,511,735
5	St. Louis.....	2,650,000	758,037	296,676	5,365,891
12	Kansas.....	875,000	193,059	100,763	1,794,360
10	Nebraska.....	850,000	229,700	164,478	3,193,158
660		\$83,906,000	\$22,324,238	\$9,348,454	\$191,506,669

NORTH, 1889.					
No. of banks.	State.	Capital stock.	Surplus.	Undivided profits.	Loans and discounts.
76	Maine.....	\$10,660,000	\$2,658,999	\$1,312,515	\$30,442,370
51	N. Hampshire.....	6,317,800	1,845,303	666,099	10,004,733
49	Vermont.....	7,466,000	1,691,177	664,600	12,744,239
201	Massachusetts.....	45,049,430	14,571,535	5,537,811	100,998,077
53	Boston.....	51,800,000	13,744,970	3,845,207	147,659,370
6	Rhode Island.....	20,384,050	4,408,363	1,944,724	26,131,711
24	Connecticut.....	24,024,370	6,807,079	1,760,605	46,891,130
285	New York.....	34,329,000	11,056,818	6,557,680	101,789,036
45	New York City.....	48,850,000	33,052,900	11,967,798	309,443,400
6	Albany.....	1,800,000	1,400,000	192,785	7,388,023
88	New Jersey.....	13,524,640	3,815,351	2,285,792	43,024,984
235	Pennsylvania.....	24,160,580	13,321,113	3,370,738	86,451,196
24	Philadelphia.....	23,408,000	11,724,303	2,205,712	96,453,861
24	Pittsburg.....	10,430,000	5,162,909	931,368	35,029,127
18	Delaware.....	1,733,985	475,794	138,078	3,317,887
3231		\$321,905,255	\$88,182,805	\$31,911,066	\$749,322,642

## SOUTH, 1889.

34	Maryland.....	\$2,982,000	\$1,073,789	\$289,849	\$8,010,683	\$7,348,151
17	Baltimore.....	11,713,260	3,953,000	864,272	28,829,895	21,411,393
1	District Columbia .....	252,000	60,000	59,819	321,414	864,065
7	Washington .....	1,575,000	673,000	159,231	5,401,856	8,639,393
30	Virginia .....	4,076,500	1,659,919	372,293	12,156,945	10,675,152
19	West Virginia .....	1,856,000	477,990	90,534	4,311,458	3,470,387
18	North Carolina.....	2,276,000	586,154	284,414	5,331,796	3,955,276
16	South Carolina.....	1,798,000	842,500	811,732	5,910,898	3,171,322
27	Georgia .....	3,661,550	1,127,914	539,980	8,037,631	5,392,124
13	Florida .....	950,000	130,650	72,077	2,220,063	2,595,540
25	Alabama .....	3,891,100	937,888	442,486	7,691,099	6,008,817
12	Mississippi.....	1,130,000	311,300	72,258	2,539,137	1,849,971
5	Louisiana .....	500,000	108,000	32,271	986,886	938,760
9	New Orleans .....	3,125,000	1,550,125	334,198	11,315,487	12,544,317
115	Texas.....	13,408,690	3,156,701	906,447	25,319,042	18,002,037
8	Arkansas .....	1,200,000	237,000	43,071	2,787,685	2,273,113
45	Tennessee .....	7,605,000	1,744,762	797,529	19,214,970	14,000,829
62	Kentucky .....	10,002,900	2,334,765	632,465	18,389,361	11,281,524
9	Louisville.....	4,151,500	1,093,928	341,653	11,011,161	4,268,055
472		\$76,454,510	\$21,937,991	\$7,136,579	\$79,787,377	\$73,093,232

## WEST, 1889.

197	Ohio.....	\$24,404,000	\$6,095,999	\$1,796,281	\$55,868,869	\$47,431,130
13	Cincinnati.....	8,900,000	2,068,000	575,999	23,266,745	18,845,395
9	Cleveland.....	6,750,000	1,064,000	523,881	17,844,730	13,488,347
97	Indiana .....	12,284,500	3,811,589	1,264,735	28,681,059	28,581,945
168	Illinois .....	15,204,000	4,997,209	1,970,331	40,918,853	39,311,620
10	Chicago.....	15,550,000	\$755,000	1,901,451	70,104,937	54,914,859
104	Michigan.....	11,244,600	2,591,032	1,212,786	29,953,092	24,186,299
8	Detroit .....	4,400,000	552,000	413,599	13,892,833	9,829,096
58	Wisconsin.....	4,925,000	1,404,834	502,935	15,946,304	15,143,103
3	Milwaukee .....	850,000	300,000	221,842	4,408,915	5,185,933
132	Iowa .....	10,540,000	2,883,803	985,612	25,809,477	20,663,814
57	Minnesota.....	14,145,000	2,641,922	1,431,997	37,273,270	26,837,605
39	Missouri .....	2,882,100	602,147	145,722	5,644,919	5,585,449
5	St. Louis .....	4,400,000	840,000	283,548	10,419,579	8,491,082
10	Kansas City.....	1,800,000	846,500	223,286	18,030,415	11,932,978
3	St. Joseph .....	1,000,000	81,500	23,035	2,972,373	2,599,573
162	Kansas .....	13,010,100	1,911,453	702,983	22,454,043	18,042,098
107	Nebraska .....	7,285,000	1,261,109	442,680	16,111,975	11,344,093
7	Omaha.....	3,300,000	457,500	143,005	10,145,332	8,493,880
1198		\$162,874,390	\$40,338,597	\$14,765,689	\$450,318,506	\$370,910,925

\* Exclusive of reserve cities.

In 1879 there was not a national bank in Mississippi, nor was there one in Louisiana outside of the city of New Orleans. On July 12th last Mississippi had twelve national banks, with a capital stock of \$1,130,000, and Louisiana, outside of New Orleans, had five national banks, with a capital stock of \$500,000.

In addition to these banks, there have been reported in the columns of the MANUFACTURERS' RECORD since July 12 fifty-one new national banks, with a capital stock of over \$6,765,000 up to Dec. 1st. Texas takes the lead with 20 new banks, with an aggregate capitalization of over \$3,400,000. Tennessee had five, with \$550,000 capital; Kentucky five, with \$1,050,000 capital; Georgia three, with \$150,000 capital; Arkansas two, with \$80,000 capital; Louisiana three, with \$375,000 capital; Mississippi two, with \$175,000 capital; Alabama two, with \$150,000 capital; Maryland three, with \$150,000 capital; and Virginia one of \$50,000; West Virginia one of \$50,000; North Carolina one of \$150,000; the District of Columbia one of \$200,000; South Carolina one of \$25,000, and Florida two of \$100,000 capital. Between February 11, 1879, and September 19, 1888, fifty-two national banks were placed in the hands of receivers; twenty-five in the North, fourteen in the West, seven in the South, and six in the extreme West and Pacific coast States. In ten of these cases fraudulent management was charged; seven in the North, two in the West, and one in the South. During the period January 4, 1879, to October 4, 1888, 242 banks went into voluntary liquidation under the provisions of Section 5220 and 5221 R. S. One hundred and thirty-five of these were in the West, fifty-nine in the North, twenty-seven in the South, and twenty-one in the extreme Western and Pacific coast States.

## VIEWS OF LEADING AMERICAN BANKERS.

No class of business men need to keep so thoroughly posted on the movements of trade and industry throughout the entire country as bankers and brokers. The accompanying letters from leading bankers North and South show that they find that the MANUFACTURERS' RECORD is absolutely invaluable to them in doing this.

A great revolution in the business interests of the country is in progress. The South is becoming the center of activity in railroad, financial and manufacturing interests, and it is a matter of necessity for every well informed, progressive business man to watch the changes that this revolution is destined to occasion. In no other way can this be done than by reading the MANUFACTURERS' RECORD. We invite your attention to the following letters, and would be glad to have your subscription:

## A Bright Picture of the South's Future.

FREDERIC TAYLOR &amp; CO., BANKERS AND BROKERS, NEW YORK.

NEW YORK, November 13, 1889.

I consider the MANUFACTURERS' RECORD invaluable to every one interested in the South. My view has already been presented through your columns—that we shall see, during the next twenty-five years, a repetition in the South of the prosperity which the Northwest has enjoyed for the last quarter of a century; and as we now wonder at the marvelous increase in population and wealth which has taken place, at the great cities which have grown up, at the stupendous industries which have been created within the recent past in the West—so we shall one day, within the comparatively near future, be amazed at the changes in the South—at the phenomenal development of its varied resources and the enormous increase in its population and material riches. Of course, these changes will present the same opportunities which the West has so plentifully afforded for profitable investment, and the best way I know of to "keep track" of what is "going on," and posted as to the opportunities offering, is to take the MANUFACTURERS' RECORD.

FREDERIC TAYLOR.

## Of Inestimable Service.

WILSON, COLSTON &amp; CO., BANKERS, BALTIMORE.

BALTIMORE, November 26, 1889.

Our own experience proves the MANUFACTURERS' RECORD to be a good advertising medium, and that it unquestionably is of inestimable service in the field which it fills so well.

WILSON, COLSTON &amp; CO.

## Every Number of Great Value.

CORDLEY &amp; CO., BANKERS, 121 DEVONSHIRE STREET, BOSTON.

BOSTON, November 13, 1889.

Our opinion that the New South contains more and better fields for profitable enterprise than any other part of the country has been frequently expressed in the weekly market letters of our house, and is attested by our own investments and those of our clients. We and they have such important interests there that we especially appreciate and esteem your journal as a representative organ of Southern industries. While we do not always agree with some of the economic theories which you advocate, we are happy to bear witness to the ability and intelligence of your arguments and to the fullness and general fairness of your information. We regard the MANUFACTURERS' RECORD as the most valuable statistical compendium concerning the development of the New South which is anywhere published. Every number of it commands our careful attention.

CORDLEY &amp; CO.

## Foremost Publication of Its Kind in the Country.

JOHN L. WILLIAMS &amp; SON, BANKERS, RICHMOND.

RICHMOND, VA., November 22, 1889.

We have found the MANUFACTURERS' RECORD full of valuable information and statistics. It is the foremost weekly publication of its kind in the country. The good it has done to the South, and to those whom it has attracted hither, in bringing money and muscle into this region, by publishing to the world the immense advantages which the South enjoys, it would be hard to estimate. We also prize the MANUFACTURERS' RECORD as an advertising medium.

JOHN L. WILLIAMS &amp; SON.

## No Other Periodical Which Approaches It.

FIRST NATIONAL BANK, OF LITTLE ROCK, ARK.

LITTLE ROCK, ARK., November 14, 1889.

I am very glad to know that you will send a copy of a coming edition of the MANUFACTURERS' RECORD to every bank in the United States. I trust that it will result in a host of additional regular readers, for I am confident that there is no other periodical which approaches it in furnishing information of progress and opportunities in the South. And with the vast untutilized natural resources of this section of country, information concerning it must be of great value and interest in all sections of the country.

My high appreciation of your publication makes me wish it the increased prosperity that will come with the multiplication of its present large circulation.

LOGAN H. ROOTS.

## Invaluable to Bankers and Brokers.

MERCHANTS NATIONAL BANK, BALTIMORE.

BALTIMORE, November 13, 1889.

We gather more information from the MANUFACTURERS' RECORD respecting progress in the South than from all the other publications received by us combined. We consider it alike invaluable to the manufacturer, merchant and banker who desires to keep posted.

E. H. THOMSON, Cashier.

## Of Great Value to All Bankers and Brokers.

BROWN &amp; LOWNDES, BANKERS AND BROKERS, BALTIMORE.

BALTIMORE, November 12, 1889.

We take pleasure in informing you of our great appreciation of the usefulness of your paper, and its worth and value to all bankers and brokers, particularly those whose business is more closely connected with Southern securities. Its value as a means of calling attention to the great industrial progress in the South is hard to overestimate, and we find it of very great use in our business on account of its enterprise, accuracy, and the reliability of its statements.

BROWN &amp; LOWNDES.

## The South Fortunate in Having Such an Exponent.

THE FIRST NATIONAL BANK, FORT PAYNE, ALA.

FORT PAYNE, ALA., November 13, 1889.

I deem the South indeed fortunate in having such an able and energetic exponent of its resources and opportunities as I find your paper to be. It is proving not only a stimulus to the business activity of the South by its support, but also brings to the attention of the Northern capitalists a ripe opportunity for profitable investment.

G. E. LATHROP, Cashier.

## Its Good Work Beyond Estimate.

THE NORTH TEXAS NATIONAL BANK, DALLAS, TEXAS.

DALLAS, TEXAS, November 15, 1889.

For more than three years I have read the MANUFACTURERS' RECORD with pleasure and profit. The good work that it has done in giving correct information to the capitalists of the East regarding the wonderful possibilities of the South cannot be estimated. The South has the raw material and undeveloped resources; the East has the money with which these stores of unproductive wealth can be made available. Any agency that causes the co-operation of these two elements is of incalculable value to both.

HENRY EXALL.

## Find it Very Valuable.

FISHER &amp; SHAW, INVESTMENT BANKERS, BALTIMORE.

BALTIMORE, November 12, 1889.

We find the MANUFACTURERS' RECORD very valuable and interesting in the promptness and extent of its information as to the industrial enterprises of all kinds which are now developing the natural advantages of the Southern States.

FISHER &amp; SHAW.

"WHAT a marvelous thing," says the Atlanta Constitution, "is this cotton, that having oppressed the South, is now going to enrich it above all other sections of the republic!"

The other day the Central railroad ordered 5,000 new freight cars—to help carry its overwhelming business. The East Tennessee has just ordered seventy-five new engines—to relieve the glut on its lines! What is the cause of this extraordinary growth in freights!

Cotton—largely! Or rather cotton-seed. Ten years ago a farmer brought four bales of cotton to Carrollton. That made one ton of freight—and the railroads were then done with his cotton crop. He now brings his four bales of cotton, or one ton—and also two tons of cotton-seed, from which the one ton of lint was stripped. The railroad takes the two tons of seed to Atlanta and delivers them to the oil mill. The mill takes 480 pounds of oil out of the two tons of seed, and sends 1,520 pounds of cotton meal or fertilizer, back to the farmer—and then ships the quarter of a ton of oil to the West. Where the road formerly got one ton of through freight from four bales of cotton, it now has five tons, four tons of which are local freight."



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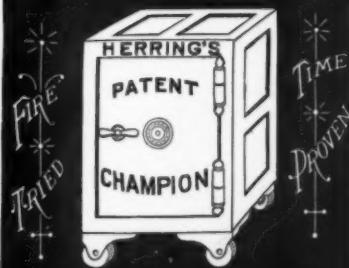
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Latest Improvements in Fire and Burglar Work secured by Time Lock.  
Special attention given to Collections.

L. C. CANNON, Cashier.



## "THE SUWANNEE ROUTE."

### Completion of a New Road Into Florida.

The Georgia Southern & Florida—Its Equipment, Its Enterprise, and Its Phenomenal Success.

In the year 1883 a veteran contractor of Macon, Ga., Col. A. J. Lane, suggested to his fellow-townsmen the project of a direct railway to Florida—a line running due South, to penetrate the vast untouched timber area lying between the line of the Central Railway on the west and the East Tennessee system on the east. The advantages of such an enterprise were carefully detailed, and the prediction ventured that the undertaking would not only prove remunerative from its inception, but if properly equipped it would soon establish itself as a favored route to Florida.

This was six years ago. Mr. Lane is dead; but in '87 a company was organized, and on January 1, 1890, a superb line of steel, 285 miles in extent, much of it as

pay a good return on the money invested in its construction. The road's revenue from through travel cannot now be estimated. Being a short line—full seventy miles shorter than all competitors, it will be presumably large.

#### THE ROAD'S CONNECTIONS.

The Georgia Southern & Florida enjoys unusual advantages in the matter of connections. Several competing systems center in upon Macon and are seeking its favors, while it crosses no less than four trunk lines, representing as many systems in its course to Palatka, its extreme southern terminus. Not content with this, its management is now contemplating an extension north to Birmingham, in Alabama, a distance of 230 miles, and a charter has been obtained and a preliminary survey of the route has been made. A glance at the accompanying map will enable the reader to properly define this proposed extension, and a knowledge of the country to be traversed, rich as it undoubtedly is in both agricultural and mineral products, will afford some idea of the enormous carrying trade that awaits its completion.

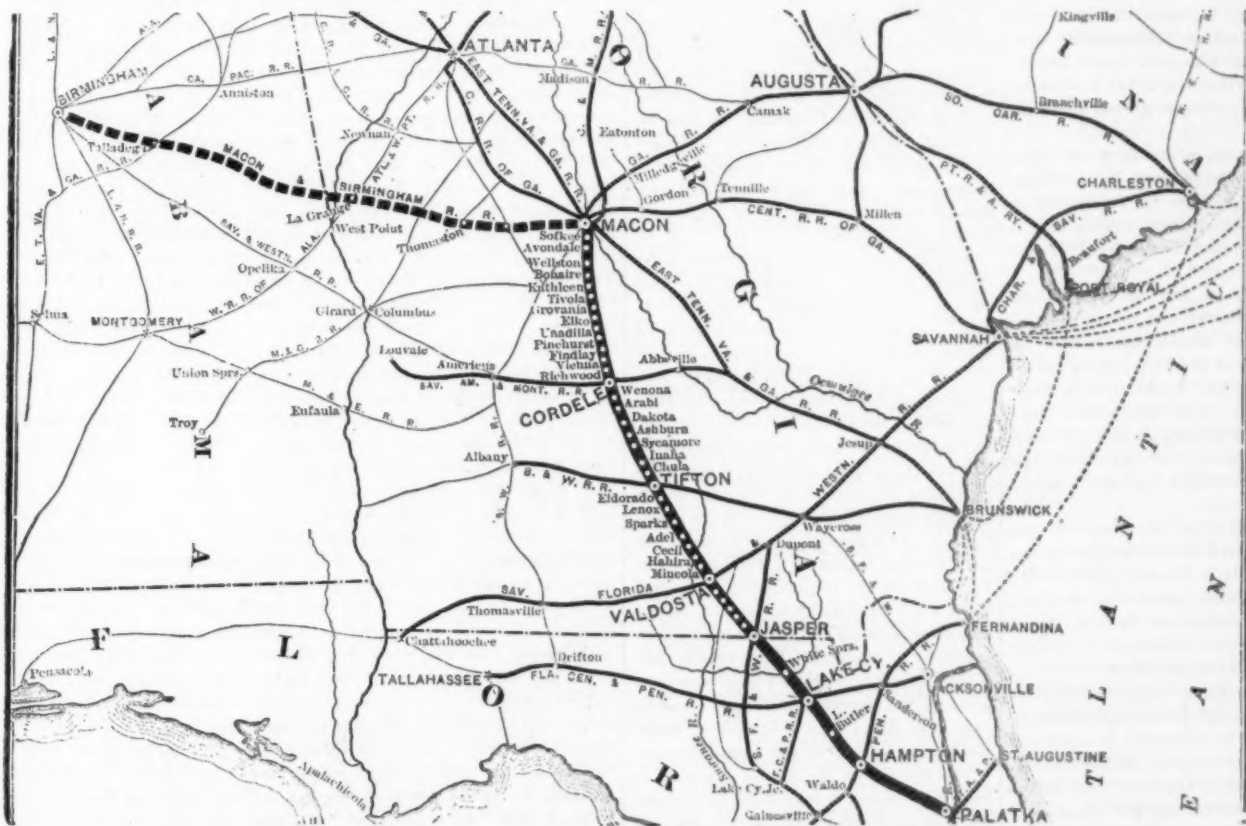
one of the largest inland cotton marts in the South. Above 100,000 bales of cotton are marketed there annually, compressed, and sent to local and foreign markets.

Palatka, in Florida, the southern terminus, is one of the most charming of the river towns in that State. Situated at the head of deep water navigation on the St. Johns, its harbor is open to all vessels that enter over the bar, and it is now the rendezvous of all the light-draught craft that ply the waters of the upper St. Johns and its tributaries. Here the company have constructed commodious wharves to accommodate the freight to be received and unloaded.

Lake City, in Columbia county, is an important town on the road, and is beautifully located in the undulating country of the northern counties of Florida. It is the seat of the State Agricultural College, and a knitting mill is in operation there employing 700 people. The long staple, or sea-island cotton, is successfully cultivated in the contiguous lands, and tobacco of the better grades is successfully raised. Two years ago, at the Cincinnati exposi-

advantages of through freight rates, enabling its merchants to distribute their goods over a large territory.

The lands around Cordele have a black, gravelly, sandy soil, with a hard clay sub-soil within six to ten inches of surface. They are susceptible of a high state of cultivation and the farms of this section, as a rule, are very profitable and well cultivated. The Cordele Security Co., the Macon Construction Co., and the Americus Investment Co., of Americus, Ga., own the unsold lands on which the town is located and they are offering lots at one uniform price, and, although the companies have placed in manufacturing enterprises, artesian wells, academy buildings, brick buildings, and improving streets, &c., hundreds of thousands of dollars, yet to induce settlers and the building up of the city, they still offer free sites to all manufacturing enterprises, and will do all in their power to promote their growth and development along the line of the two railroads centering here. These companies offer their lots at one hundred dollars each, and if desired will give purchasers



MAP OF THE GEORGIA SOUTHERN & FLORIDA RAILROAD.

straight as a plummet line, will link Macon, in Middle Georgia, with Palatka, at the head of deep water navigation on the St. John's river. I am prepared to doubt if any railroad enterprise in the South has been more rapidly and substantially constructed, and with such immediate beneficial results to its shareholders, as this "Suwannee Route" into Florida. Its road-bed is thoroughly made, its rolling stock is elegant and of approved patterns, its schedules swift, and its management thorough and business-like. Young men built it, and young men control it. Its president is under thirty, and its general manager under forty, and its employees, one and all, appear to have been selected from the ranks of the energetic young fellows who have had their training in the shops and in the service of some of the older companies of the State.

The earnings of the road have been phenomenal from the beginning. Only 150 miles of the whole line was in operation at the beginning of November, yet its earnings have footed for several months \$20,000 in excess of its expenditures. This sum alone earned each month in the year would

#### A NEW COUNTRY DEVELOPED.

The new territory opened up, and to be developed by this "Suwannee" road, is peculiarly attractive to the stranger and traveler. For miles the right of way seems to be hewn out of the solid forests of pines, and the line can be traced until the power of the vision is exhausted. The grandeur of this limitless park cannot be described. Not a shrub encumbers the soil, but out of the beautiful grass, green and refreshing even now, when winter is on, springs the majestic trees whose resin and lumber have made Georgia rich.

#### THE CITIES AND TOWNS ALONG ITS LINE.

The prosperous city of Macon is the present northern terminus of the "Georgia Southern & Florida," and its shops and general offices will be located there, for the road is distinctively a Macon enterprise. Ground has been broken for the erection of a handsome passenger station, and the company own some valuable franchises along the public streets of the city. The population of Macon is estimated to be 30,000, and it is the seat of many valuable manufacturing industries, and besides being

tion, the tobaccos from about Lake City were pronounced the finest raised in the United States, and a premium was awarded them as such.

In Hamilton county, Florida, the road crosses the Suwannee river, immortalized in verse, and from this singularly beautiful stream it adopted its name. Hard by the railway bridge now being constructed to span its waters, is a remarkable sulphur spring, discharging 40,000 gallons of water per minute. A hotel with ample accommodations will be erected there, and a watering resort established.

#### THE GUTHRIE OF THE SOUTH.

Cordele, a new town in Dooley county, Georgia, is an important point on the road. Two years ago a simple farm-house marked the site of the embryo city, and now two thousand people have other houses there. Brick blocks have gone up with magical rapidity, two cotton mills are building, a bank is in operation and the town is aspiring already to gas and water supplies. The Savannah, Americus & Montgomery Railroad intersects the "Suwannee" road at this point and the place enjoys the unusual

in every case the option of returning deeds to lot any time after twelve months and receiving back the money with interest at 6 per cent. from first purchase. Under this agreement not a single lot has ever been returned, and no purchaser has failed to realize from 25 to 100 per cent. in twelve months on lots so bought.

#### AN EXPERIMENTAL FARM.

One of the chief points of interest on the road is an experimental farm, owned by the road, and upon which as much as \$20,000 have already been expended. This experimental station is located in Irwin county, Georgia, about 180 miles below Macon. One thousand acres of land immediately on the line of road are being improved and brought to a high state of cultivation. This novel and commendable experiment on the part of the management is for the purpose of demonstrating what these Georgia pine lands are capable of producing, and with the ultimate view of inducing settlers into that section. The soil of the station is similar to that about Cordele, and all through that section—a sandy loam with clay sub-soil, very productive and easily tilled. The timber is

mostly pine, but the tupelo gum and yellow ash are frequently intermixed. Mosses, ferns and pitcher plants abound on every hand. Prof. B. Irley, a graduate of the Mississippi Agricultural College is employed as the superintendent of the station, and seems to be a practical and energetic foreman. He informed the writer that the lands thereabouts were well adapted to fruits, flowers, and field crops generally. The farm itself will be subdivided, and experiments with all the grasses, fruits and staple crops will be undertaken. One hundred laborers are employed and the lands are being carefully prepared for the fall planting. No expense has been spared to equip this station. Nearly five hundred acres of the tract are already cleared, and much of it under fence. Peaches, pears, apples, apricots, grapes, strawberries, raspberries, blackberries, water melons and cantaloupes, are among the fruits to be planted. Tobacco, long staple cotton, jute, Indian corn, oats and barley, are to be the staple crops. One feature will be the introduction of nut trees. Pecan, almonds, filberts and hickory trees will be planted, and their development carefully noted. The superintendent will give especial attention to the grasses. Bermuda and Texas blue grass grow luxuriantly on this resinous soil, but it remains to be seen if the sweeter grasses or clover will do as well.

In the stock-pens of the farm are some fine Holsteins, Devons, and Jerseys from the Shade Land Farm in Pennsylvania, an Arabian stallion from France and a jack from Spain and above twenty brood mares.

The sheep-pens and fowl-yards are equally well stocked. In the former are Merinos, Oxfords and Southdowns.

The fowls are of the best breeds—white Brahms, Plymouth Rocks, brown Leghorns, bronze turkeys, Pekin ducks, Toulouse geese and fan-tail pigeons crow and cackle in their pretty little enclosures, and roost in bits of cottages that would adorn the streets of a town.

It is impossible in the scope of this article to do justice to this really fine enterprise. The farm is a conception of W. B. Sparks, the young president of the road, whose energy and splendid business record have inspired the confidence of stockholders both at home and abroad.

The present officers of the road are W. B. Sparks, president; J. Lane, general manager; H. L. Jewitt, treasurer; A. C. Knapp, traffic manager; S. C. Hoge, superintendent; W. H. Wells, chief engineer. All native Georgians, I believe, and the majority of them citizens of the city of Macon. No railway in Georgia has ever been projected and built where the desire for its success seems so universal. My conviction is that the enterprise is already an achievement.

### The Law of Gravity in the Manufacturing Business.

The press of the entire country is beginning to appreciate the truth of what the MANUFACTURERS' RECORD has long been preaching—and that is that Southward the course of industry is rapidly tending. In a late issue The World's Progress says:

It is now recognized in New England that there is really such a law, and that it has a tremendous force and never fails to be executed. Mechanics and capitalists are equally concerned to know what is the scope and meaning of this law, and then to study carefully its relation practically to their business as craftsmen or as employers or masters. In New England it is rapidly beginning to be felt that the manufacture of cotton goods must eventually be carried on near the place of production, and hence a general rule is being formulated that in the near future raw materials must be manufactured near the place of production if any money is to be made in the operation.

## GEORGIA RAILROAD.

### The New Covington & Macon.

#### Its Present Status and Its Prospective Importance.

Among the important Georgia railroads that have been completed and equipped during the past two years is the Covington & Macon, one hundred and five miles long, connecting Macon with the prosperous town of Athens, in the northeastern division of the State. This railway was commenced by a local company some years ago, and the original intention of its projectors was to carry it northward from Macon and tap the Atlanta & Augusta road at Covington, forty miles east of the former city. Before the dirt had been fairly broken, Mr. E. C. Machen, a young and enterprising railroad contractor, came to Georgia from Kentucky, and associating himself with the new road, soon obtained control of its affairs. With rare sagacity, he determined to deflect the survey further to the east, and crossing the Atlanta & Augusta road at Madison, seventy miles east of Atlanta, he fixed its northern terminus at Athens, where he tapped the Richmond & Danville system, and now awaits the coming of the Georgia, Carolina & Northern Railroad building from Monroe, in North Carolina, southwest to Atlanta—an enterprise fostered by Baltimore capitalists, and which will be operated as a through route from Norfolk, in Virginia, to the Georgia capital.

If local reports are to be credited, the Georgia, Carolina & Great Southern has an eye on the Covington & Macon link, and its early purchase by that corporation is freely predicted. If these rumors are true the full significance of Mr. Machen's brilliant move upon Athens will be appreciated. The Norfolk road will undoubtedly continue on its straight way to the great Atlanta entrepot, but by pronging at Athens it can reach an equally important railway center at Macon and open negotiations with the splendid new and independent system known as the "Georgia Southern & Florida," whose Florida terminus is nearly three hundred miles south at Palatka, on the St. John's, and whose western end will be fixed at Birmingham, in Alabama. It requires no particular insight into railroad matters to comprehend the importance of such a combination as this and the immediate traffic results that would follow its consummation.

The Covington & Macon Railroad is built through one of the richest agricultural sections of the State of Georgia and the densest populated. Along its line are situated several charming towns, one of which, a new town, located in the county of Jasper, has been called Machen, after the energetic young contractor who built it and equipped it.

Along its right of way, through the counties of Oconee and Clarke, are some of the finest forests in the State, embracing all the growth incident to the climate, oak, hickory, poplar, ash, walnut, pine, &c. Millions of feet of this valuable timber can be bought and marketed at the most reasonable rates.

In the country traversed cotton is extensively grown, and the rich, loamy lands produce all the cereals abundantly. The climate is salubrious and the people prosperous and intelligent. In fact, it is laid throughout its entire length in the garden area of Georgia.

The main offices of the road are located for the present at Macon, where all of its necessary officers reside. The president of the road is J. E. Jones, Esq., a prominent citizen and capitalist of Macon. J. C. Key is its vice-president, and A. G. Craig, a young railroad officer of much promise, is the superintendent.

The road was opened for traffic on the 10th day of December, 1888, and by the time this sketch is made public it will have reached and overlapped its first anniversary.

## Morristown, Tennessee.

### THE PLATEAU CITY OF THE GREAT VALLEY OF EAST TENNESSEE.

#### The Coming Railroad and Manufacturing Center of the Richest Mineral and Timber Section of the Union.

The duty of presenting the salient features of the location, the resources, the condition, and the possibilities of Morristown and its vicinity, is somewhat embarrassing to me, since my training and business have confined me all my life more particularly to the field of geology and mineralogy, and the practical developments of mines and quarries, rather than the building of towns and cities.

However, having been in this section for the last seven months, exploring and making examinations, I can furnish the MANUFACTURERS' RECORD with a brief report upon Morristown and its surroundings. I will not go further back than four years, during which time—according to my information—the town has shown a healthy and steady growth. Three years ago it was only a big scattered village; now it is being rapidly formed into a regular city; and has two large hotels and several fine boarding houses, splendid churches, an opera house, two banks, and a number of factories that are working to their utmost capacity and making money. The healthfulness of Morristown is proverbial. Malaria and malarial diseases are unknown. Persons, who in the Northern States are afflicted with bronchial troubles and pulmonary diseases, and were believed to be in the incipient stages of wasting consumption, have been restored to health by the tonic atmosphere of Morristown. The temperature here is singularly equable. It is never very warm in summer, or very cold in winter. For this reason, parties here are seriously considering the idea of erecting a grand hotel on one of the commanding eminences in the city, to be open winter and summer. It is believed that such a hotel would be crowded in winter with people from the North, who wish to avoid the extreme rigors of their higher latitudes, and yet do not care to be subjected to the enervating effects of the more southern retreats; while in summer it would be filled with Southern people who annually flee to the mountains during the "heated term" for a period of "rest and refreshment." Morristown is not on a "boom;" and is not suffering from inflated prices; but is growing and developing steadily and rapidly. The increase in business enterprises adds largely to the demand for houses. The demand for both dwelling houses and business houses can not be supplied. The enterprise most needed just now is a blast furnace. No place is more favorably situated for such an enterprise. Immense bodies of limonites, magnetites, manganese and manganiferous iron ores are within from one mile to four miles of the city; while a short distance south, on the Carolina Division of the East Tennessee, Virginia & Georgia Railroad, are large deposits of specular and brown iron ores. Morristown is the county seat of Hamblen County; is situated at the junction of the East Tennessee, Virginia & Georgia Railroad with the Cincinnati, Cumberland Gap & Chicago Railroad. It is 157 miles east of Chattanooga, 43 miles east of Knoxville, 87 miles west of Bristol, 287 miles west of Lynchburg, Va., 100 miles north of Asheville, N. C., and 45 miles south of Cumberland Gap. It has nearly trebled its population since 1880.

It has one of the most flourishing building associations in the State.

It has the finest court house and opera house in upper east Tennessee.

It is the center of the richest and most extensive agricultural district in the State.

It has an elevation of 1,300 feet above sea-level, and affords mountain views of surpassing beauty.

The city is lighted with electric lights, and a system of street railway is projected. Also water-works.

It has five commodious brick church edifices, and two good brick school buildings, and model graded schools.

It has abundance of merchantable timber, marbles, slates, lead, zinc, etc., adjacent to it.

It has more and richer iron ores and manganese, and a greater variety of them, immediately around it, and accessible to it, than any other city in the South.

A recent analysis of the iron ores and other minerals—collected by myself in this section—made by Prof. Robt. C. Price, of Virginia, shows that the brown ores are free from phosphorus and sulphur, and average over 56 per cent. of metallic iron. The magnetic red ore has over 66 per cent. of metallic iron, and the specular ore over 55 per cent. The manganese ores show 53 and 65 per cent. of "manganese dioxide." These ores are essentially steel ores. The zinc ore assays "62 per cent. zinc," and the galena "85 per cent. metallic lead." The antimony 100 per cent., being the real metal itself—"pure metallic antimony, essentially 100 per cent. antimony."

The above assays of Professor Price are, undoubtedly, very encouraging for the establishment of a furnace or furnaces at Morristown; especially as the "steel ores" are so near the town, and in great abundance, the highest grade of the brown ore assayed being not more than one mile from the town, and the best manganese only three miles; while timber for charcoal is very abundant; and coke is now being hauled through Morristown to Birmingham, Ala.

The section immediately around Morristown is rich in marbles, furnishing a greater variety of variegated marbles than any other portion of the South that I have examined in my five years of explorations. These marbles, situated as they are, in the immediate vicinity of the town, show all grades of colors, from the red and white variegated to a mottled dove-color, exhibiting more beauty and delicacy of coloring—and what artists call "life"—than can be found anywhere in the United States, in my opinion.

Within two miles of Morristown there is a lead of pure black marble, similar to the rare jet black marble of Galway, Ireland—the only thing of the kind that I have yet found in the United States.

In addition to the resources above mentioned, there exists in this section a splendid body of slate—suitable for roofing, flooring, and ornamental work—of fine textures and rare colors. It is so situated as to make its quarrying and placing upon the market a matter of small expense. The colors are silvery brown, buff and dark green, and cannot be excelled as a contrast slate with blue-black and red slates to make fancy or "French roofs." Also, those pieces which would not split thin and fine enough for roofing slates, could be sawn into flooring tiles, hearth-stones, mantels, etc., and parts of the vein would make hone-stones.

Immense undeveloped deposits of ochreous slates, suitable to make paints, etc., are within two miles of Morristown. Also, clays.

The rapid development of the South is creating a lively and increasing market for paints, and there is no other locality in the South, so far as I know, where the materials for manufacturing a cheap and durable paint are more abundant and accessible.

The section around Morristown abounds in all the merchantable timbers anywhere found in the great Alleghany range; and



wood factories at Morristown would have an abundant and cheap supply of all kinds of wood; and the contiguity of the great variety of variegated marbles leads me to believe that this would be, perhaps, the most advantageous point in all the South country for the erection of large establishments for sawing and dressing marbles, and for manufacturing furniture.

The chief importance of this section is its central position as a steel-making place; while the marbles, slates, ochres, zinc, etc., are valuable auxiliaries to make a city of various industries.

Variety of manufactures is the best strength of a city.

The board of Mayor and Aldermen of the City of Morristown has passed an ordinance exempting from municipal taxation for ten years the grounds, buildings, machinery, materials and capital of such persons, firms, or companies as may engage in manufacturing enterprises in Morristown, provided such establishments give employment to fifteen or more persons; and the county court of Hamblen county has made a similar order; so that hereafter such manufacturing enterprises will be free from all taxation in Morristown, save the merely nominal tax for State purposes, which will not exceed one-fifth of one per cent.

With this privilege, and with the railroad facilities and advantages for the manufacturing of various goods, and with abundance of raw materials at hand, no place in the South can offer better inducements.

I have not mentioned, so far, the precious metals or gems. While my explorations since I have been in this section have directed me more particularly to the ascertainment of the quantity and quality of iron ores, manganese ores and marbles, I have incidentally observed something of its wealth in zinc, lead, antimony, and slate; and have casually examined several places where both gold and silver ores unquestionably exist; to what extent I am unable to say, but the indications are favorable for the development of profitable mines. Also, I may say, that there are strong indications of natural gas, or petroleum. No tests have been made; and, indeed, none of the mineral wealth of this region has been developed. It is virgin territory; and for that reason all the more desirable as a field for investment.

Take it all in all, I can truthfully say that, in all my thirty years' experience, both in Europe and America, I have found no section of country comparable to this in the extent, variety and purity of its mineral ores, marbles, slates and ochres; in the wide range of its agricultural products; in the extent and variety of its timbers; in the abundance of pure water and water powers; in the salubrity of its climate; in the peaceful and law-abiding character of its people; and the grandeur of its scenery. To say that I am in love with it is not enough—I am enamored of it; and Morristown may yet be the real Pittsburgh of "The New South."

THOS. P. WILLIAMS, M. E.

THE MANUFACTURERS' RECORD publishes news. It does not fill up with stale matter gleaned from other journals. The information on Southern affairs furnished to its readers is fresh, complete and authentic.

THE South grows all the cotton woven in this country; why should she not have a monopoly in the manufacture of cotton goods? The South has iron and timber in great abundance and cheaper than any other section; why should she not control the manufacture of all articles of ordinary use.

## The Attractions of Liberty, Va.

"Heaven and earth never agreed better to frame a place for man's habitation."

It would be difficult, if not impossible, to express more tersely or more truthfully the merits of this region of country for all the purposes of human habitation than is done in the above quotation of the language uttered, upon first beholding it, by one of its earliest settlers. True then, as meeting all the requirements of man at that stage of his existence, it has lost none of its truthfulness or force from the rapid development of the human race in modern times; for, in addition to the attractions which then met the eye of the delighted beholder and elicited his ardent commendation, the industry of man has disclosed the existence of unlimited stores of material for the exercise of human skill and labor, has partially opened up a way to them, and has brought into close proximity to them the civilizing conditions of healthful social life. Perhaps the next best way to a personal visit and actual critical inspection, for the inquiring reader to obtain some definite comprehension of the peculiar and most unusual merits of Liberty and the surrounding country, is to examine carefully a map of the State.

He will find that it is in the richest agricultural section of Virginia, that it is a part of the great plateau called locally Piedmont; that it is at too great an elevation—1,000 feet above sea level—to be affected by the malarial influences of the tide-water section; that it is sheltered from the keen western and northwestern gales by the protecting spurs of the Blue Ridge range, backed by the Alleghanies; that it is about mid-way between the Tennessee line at Bristol and the seaboard at Norfolk; that it is within a few hours easy travel of the great business centers and shipping ports of the East; that it is located in the heart of that great mineral and timber belt which is destined to become the work-shop of the world; that it is closely connected by rail with the great coal and ore deposits of southwest Virginia, and that it lacks a link of railway of only about eighteen miles to give it, by the Chesapeake & Ohio line, a near connection with the boundless coal fields of West Virginia, and with the great cities of the West and Northwest. Coal, iron ores, timber—the three prime elements of manufacture—railroad inlets from the sources of supply and railroad outlets to the markets of the world—so much he can see from the map. This is good, but this is not all. A further investigation will disclose to him many additional merits.

Unlike the usual surroundings of incipient manufacturing and mining regions, he will learn that here is an old and well-ordered society, with churches, the best modern schools and academies, public and private, and the homes of intelligent, energetic and law-abiding citizens.

Here he will find abundant and cheap labor; he will find here low-priced and fertile lands; he will find forests of fine timber, the oaks, chestnut, ash, maple, birch, walnut, hickory, poplar, &c.; he will find represented among the mineral deposits fire and brick clays of unusual excellence, kaolin, mica, asbestos, graphite, steatite, limestone, granite, bahr stone, mineral paints, galena, magnetic and hematite iron ores, &c.; and he will find sulphur, alum and chalybeate springs. Besides all these claims upon his admiration, he will find in this land, so richly endowed of nature, the germ of a beautiful, healthful and prosperous city, possessing, in addition to the usual well-known advantages of a long-established society, successful business men of liberal and progressive views; manufactures of woolen goods, of plows, &c.; of tobacco-handling machinery, of smoking and

chewing tobacco and cigars; flouring and grist mills, &c.; an adjacent country of unsurpassed beauty, and a practically inexhaustible supply of chemically pure free-stone water, brought direct from the famed Peaks of Otter by a gravity system, the last-named furnishing a recommendation which is as unusual as it is indispensable to human health, comfort and safety.

With all of these merits, there is wanting nothing but more people—men of energy and capital—to come "in and possess the land," which at first sight, it was pronounced, heaven and earth had combined to prepare as a place pre-eminently worthy of "man's habitation."

R. KENNA CAMPBELL.

## A Digression.

In giving the world, as we do in this issue, a panorama of the development of the South, we feel that the work would be incomplete without mentioning, though perhaps it is somewhat premature, the unique undertaking at Linville, in Western North Carolina.

It is in many respects different in plan and scope from anything in the South, and probably in America.

The South has made wonderful progress within the last few years, and the growth of Southern towns and cities, based on manufacturing and commerce, has been remarkable.

With the success of others to be guided by, the Linville Improvement Co. have, nevertheless, made a wide departure from the customary course, and disregarding the immediate benefits and quick returns offered by commerce, manufacturing and railroads, have selected upon its own merits a site in the most beautiful part of the "Land of the Sky," with the especial aim of making a great resort for health and pleasure.

At an elevation of 3,800 feet they have chosen a beautiful valley, from which long ridges, crowned here and there with majestic peaks, lead out in various directions.

The topography is such as to admit of a magnificent system of drives, extending from the valley to the beautiful suburbs, the well-graded roads running along the crests of ranges, giving extensive views under towering peaks and through primeval forest, which have been reserved as natural parks.

Thus, with commendable forethought, they have secured and preserved forever from defacement a system of parks and drives which older-settled places cannot have and which wealth cannot imitate.

No city in America can boast of such a park as the rugged Grandfather mountain, one of the highest and finest peaks in the Blue Ridge Range, will make; and where can be found such a supply of purest water as rushes down its slopes?

Linville being different from, has no point of rivalry with other towns; on the contrary, its success is rendered more pronounced by their prosperity, for they will contribute annually a portion of their wealth to its up-building, and when capital congregates there business, manufacturing and commerce will follow.

The prosperity of the South and of Western North Carolina means the prosperity of Linville.

Though at present secluded and difficult of access, the plans of this place are attracting wide-spread attention and railroads will not be slow to see the advantages which must accrue from the passenger traffic to this section. In fact, two engineering parties are now making their way towards Linville from the west and south-east, seeking a good location for their lines.

Knowing, as we do, the extensive plans of the company and their conservative methods, we feel safe in predicting for Linville a marked success.

## WIDE AWAKE LAREDO.

One of the Most Enterprising Cities in the United States.

Splendidly Located for Manufacturing, and for Carrying on Trade with Mexico.

The past year has been one of great activity in Laredo. The mammoth general car and machine shops of the Mexican National Railroad have been constructed here at a cost of \$600,000; a magnificent \$100,000 hotel has been built, many business blocks and 100 residences have been erected; four steel bridges have been built at a total cost of \$250,000. Five miles of electric-motor street railway have been completed, two new banks have opened for business, streets have been widened, shanties pulled down to make place for business houses, many new industries established, and the population increased from 6,000 in 1888, to 12,000 in 1889. Nine modern business blocks and 100 residences are now under construction, also a \$50,000 foundry and machine shop, and plans are drawn for a magnificent three-story brick building, to cost \$25,000, a handsome Masonic Hall, to cost \$35,000, many business blocks and fifty residences, ranging from \$2,500 to \$5,000 in value. Laredo is the gateway between the two republics, and the leading port of entry and export on the border. During October, 1888, the imports and exports through Laredo amounted to \$300,000. During September and October, 1889, they amounted to \$2,022,000, and are increasing month by month. These figures are nearly equal to all other ports on the frontier combined.

The coal mines at Laredo have recently received a large amount of new machinery, and the output greatly increased. These mines have the largest veins and best quality of coal in Texas, and the supply of coal is practically inexhaustible, and of splendid quality.

Immediately tributary to Laredo are the richest mines of old Mexico. These mines produce silver, lead, copper, etc. One of the largest concentrators in the United States has been erected at Laredo to treat these ores. Coal and water being scarce in Mexico, and being cheap and abundant in Laredo, actual experiments have demonstrated that it is cheaper to treat these ores here.

Laredo is the center of the largest wool and cotton-producing district of the South; five millions pounds of wool being shipped annually. During the months of September and October, 1889, \$22,000 worth of woolsens and \$100,000 worth of cotton goods passed through this port to Mexico.

Possessing coal and raw materials in inexhaustible quantities, Laredo will soon become a large manufacturing center for Texas and Mexico. The city council of Laredo recently reserved from sale land within the city limits, valued at \$100,000, which they will donate to manufacturing enterprises. All factories will be exempt from taxation for ten years.

THE LAREDO IMPROVEMENT CO.,  
Laredo, Texas.

COMPARE the South of to-day with the South of ten years ago. Populous towns where then were dreary cotton fields; the bustle and life of industry, the evidences of wealth, where were decay and desolation; the smoke of factories and whirr of machinery, where was perpetual silence; railroads and thriving villages, where were trackless forests and undeveloped wastes. Observe these changes, and remember that this is only the beginning!

### Assessed Value of Property in the South.

The assessed value of property in the South by States for each year from 1880 to 1889 is given in the following tables:

#### MARYLAND.

1880	\$459,187,408
1881	461,459,939
1882	464,824,879
1883	466,089,380
1884	469,453,225
1885	473,452,144
1886	476,829,611
1887	485,897,772
1888	490,016,183
1889	477,398,380

Increase from 1880 to 1889.....\$18,210,972

#### NORTH CAROLINA.

1880	\$169,916,907
1881	167,738,639
1882	180,377,525
1883	201,222,723
1884	209,590,099
1885	202,752,622
1886	202,444,733
1887	215,125,283
1888	216,000,000
1889	217,000,000

Increase from 1880 to 1889.....\$47,083,093

†Estimated—see auditor's note.

Further than the figures here given we will not be able to give until the spring of 1890. The auditor's report must necessarily be one year behind all the time.

A very liberal estimate of increase would be one million annually until the next assessment, which will occur in 1891. The new assessment, I have no doubt, will show an increase of something like ten millions more than the previous year, as did the assessment of 1887. This is the best information I am able to furnish.

G. W. SANDERLIN, State Auditor.

#### SOUTH CAROLINA.

1880	\$129,551,624
1881	133,062,834
1882	139,519,825
1883	145,442,292
1884	150,511,889
1885	149,973,365
1886	144,501,184
1887	141,074,347
1888	141,986,154
1889	145,280,343

Increase from 1880 to 1889.....\$15,728,719

†The assessment was cut down about \$8,000,000 on account of the earthquake in 1885.

#### GEORGIA.

1880	\$251,424,651
1881	270,993,888
1882	287,249,408
1883	306,912,355
1884	317,074,271
1885	321,602,665
1886	329,489,505
1887	341,504,921
1888	357,167,458
1889	380,289,314

Increase from 1880 to 1889.....\$128,864,663

#### FLORIDA.

1880	\$31,157,846
1881	36,243,523
1882	45,285,977
1883	55,249,311
1884	60,042,665
1885	70,607,438
1886	76,611,499
1887	86,265,662
1888	87,552,447
1889—Estimated	93,800,000

Increase from 1880 to 1889.....\$62,642,154

#### ALABAMA.

1880	\$139,077,328
1881	152,920,115
1882	151,520,551
1883	158,518,157
1884	167,124,594
1885	172,528,933
1886	173,808,097
1887	214,925,869
1888	223,000,000
1889	242,197,531

Increase from 1880 to 1889.....\$103,120,203

#### MISSISSIPPI.

1880	\$115,130,651
1881	115,150,120
1882	116,926,060
1883	126,754,927
1884	127,381,574
1885	125,746,836
1886	129,199,044
1887	129,887,254
1888	133,706,779
1889—not yet completed.	

"I trust you will pardon my delay in complying with your request of 2d, per telegram, but I have been waiting trying to get our assessment for 1889 completed, but it seems impossible to get in the returns, and thought best to mail you what I have, though incomplete. I feel safe in saying our increase will be from 25 to 30 millions dollars over last year, and I trust you consider the fact that by an Act of our Legislature of 1888, our banks are allowed to pay a privilege tax, in lieu of ad valorem since 1888, our increase is much greater since 1887 than is shown by our assessments, as none of our banking capital is assessed since 1887, the banks electing to pay the privilege tax. If our assessment was made now, as in 1887 and prior to that date I think our increase would be at least \$50,000,000 and none of our R. R. are assessed, as they pay a privilege tax of \$140,000 and no ad valorem tax."

W. W. STONE, Auditor.

#### LOUISIANA.

1880	\$177,096,459
1881	181,459,961
1882	197,417,125
1883	202,738,862
1884	202,166,465
1885	212,725,594
1886	217,040,079
1887	211,925,751
1888	208,076,914
1889	226,392,288

Increase from 1880 to 1889.....\$49,295,827

#### TEXAS.

1880	\$311,470,736
1881	357,000,000
1882	419,925,476
1883	527,537,390
1884	603,060,917
1885	621,011,989
1886	639,591,429
1887	650,412,401
1888	681,084,904
1889	710,000,000

Increase from 1880 to 1889.....\$398,529,264

The bonds of the State are held principally by the State in trust for the special funds of the State. The investment of the permanent school funds in county, State and railroad bonds amount to \$6,424,737. The school fund also owns about \$10,000,000 interest-bearing land notes and about 25,000,000 acres of land yet unsold. The total investments of the public free schools in Texas may be estimated at \$10,000,000.

#### ARKANSAS.

1880	\$91,191,653
1881	99,826,488
1882	94,081,027
1883	126,826,392
1884	132,653,257
1885	134,409,625
1886	139,902,601
1887	148,259,654
1888	156,954,602
1889†	166,000,000

†Partly estimated.

Increase from 1880 to 1889.....\$74,808,347

#### KENTUCKY.

Total valuation of property in Kentucky, excluding railroads, banks and corporations.

1880	\$350,563,971
1881	359,539,382
1882	365,312,448
1883	374,554,979
1884	377,588,542
1885	390,827,963
1886	385,858,892
1887	484,449,030
1888	492,653,132
1889	501,676,267

Increase from 1880 to 1889.....\$151,112,296

cluding railroads.....\$176,203,226

Mileage and assessed value of railroads in Kentucky.

1880	1,022.....\$24,909,070
1881	1,554.....32,075,212
1882	1,593.....32,347,305
1883	1,726.....31,317,374
1884	1,816.....33,120,672
1885	1,926.....33,230,398
1886	1,930.....33,547,248
1887	2,028.....35,571,631
1888	2,601.....42,207,685
1889†	2,601.....50,000,000

†This year not yet reported; the increase in miles will be about 500. Estimated \$50,000,000.

#### TENNESSEE.

1880	\$211,768,438
1881	225,289,873
1882	221,929,813
1883	222,637,873
1884	226,844,184
1885	226,749,308
1886	224,999,179
1887	239,550,081
1888	297,205,054
1889	325,118,636

Increase from 1880 to 1889.....\$113,351,198

#### WEST VIRGINIA.

1880	\$146,991,740
1881	151,479,428
1882	155,054,776
1883	174,399,734
1884	176,796,754
1885	179,958,334
1886	173,993,762
1887	177,346,389
1888	179,385,329
1889†	183,013,737

†Partly estimated.

Increase from 1880 to 1889.....\$36,021,997

## MEMPHIS, TENN.

By virtue of location, and rail and river facilities, Memphis is destined in the near future to be the great manufacturing center of the South, Southwest. It occupies the same position towards the South, Southwest that Chicago does to the West, Northwest. And as surely as did the West, Northwest make Chicago great, will the South, Southwest make Memphis great in commerce, in manufacturing, and in wealth and population. Like Chicago, Memphis is the gateway to regions of vast natural wealth in process of development. Like Chicago, Memphis is surrounded by a rich territory of untold possibilities. But Memphis has the advantage of climate over Chicago, of diversified production, of boundless forests of hard and soft wood, of nearness by many rail and river lines to the raw material of every description.

East, in easy reach by water and several lines of railway, lie the coal and iron fields of Alabama, Tennessee and Kentucky. West, and nearer than to any other city by waterways and several lines of railway, lies the coal, iron and other mineral wealth of Missouri and Arkansas.

Memphis is the head of all year round navigation on the Mississippi river to the sea. Neither sand bars or ice ever interfere with the passage of the largest boats from Memphis south. And in addition to

the great tributaries of the Mississippi, Memphis boats penetrate Arkansas on three (3) navigable rivers, Tennessee on four (4), and Mississippi on two (2). Thus its waterways are unequaled in the South or West, and unsurpassed by any interior city on the Continent.

Memphis is a hub in which ten (10) railroads center, and radiating in every direction pour into its lap the boundless wealth of raw products that lie at hand, and distribute the same, we may say, unto the ends of the earth.

But a few facts in detail.

The general trade of Memphis aggregates \$200,000,000.

Memphis this season ranks third on the Continent in net increase of bank clearings.

Memphis is the second cotton market in the South and is the largest interior cotton market in the world.

Memphis is the second, if not now the very first, lumber market of the South or West, which fact can be substantiated by indisputable statistics, ready at hand.

Memphis is the second, and probably the first, grocery market in the South.

Memphis gets the raw material that lies around it 40 to 50 per cent. cheaper than the cities of the North and East. Gets coal and pig-iron, cotton and timber cheaper than most if not all of its Southern rivals, and certainly cheaper than any of its Western competitors.

Memphis freight rates on all classes of goods shipped out of the city are favorable to the most thorough competition with rival cities North, South, East, or West. Its ten railroads and its ten thousand miles of river ways is an everlasting guarantee of cheap freight rates into and out of the city.

Memphis manufactures, both small and large are doing well, or very well, according to capital invested and business management.

Memphis will have within two years the most magnificent bridge on the Continent, spanning the Mississippi, and when completed will immeasurably multiply the many advantages it possesses as a center for manufacturing and wholesaling.

In addition to the above facts, Memphis has abundant and pure artesian water from wells four or five hundred feet deep and protected by a strata of imporous clay 150 feet thick. Its sewerage system is complete, and as near perfect as science has rendered possible.

As a result, Memphis shows an almost unequalled health record covering a period of ten years, and growing better with each year down to the present year, the record of which is phenomenal in the history of cities.

To all this, add an admirable public school system, and several private schools and colleges of great and deserved popularity, and Memphis as it is may be considered fairly before the readers of the MANUFACTURERS' RECORD.

But Memphis wants furniture and canning factories; more flouring mills; more foundries; more wood-working machinery; more stove factories; paper mills, and wool and cotton factories; more wagon, buggy and carriage factories, and establishments that manufacture agricultural implements—all these things are wanted, and Memphis capital and Memphis thrift stand ready to prove their faith by works when such enterprises are offered. Besides, there is no more inviting field for wholesaling dry goods, clothing, boots, shoes, hats, notions, etc., etc. Memphis extends a cordial invitation to capitalists, merchants and manufacturers, and pledges a warm welcome and liberal co-operation. Correspondence is invited with

ROBERT GATES,  
Sec'y Com'l Assoc'n, Memphis, Tenn.

IRON is king, and the South can make iron at prices that are beyond competition.

## FORT PAYNE, ALABAMA.

### "The New England City of the South."

Sometimes Called the "Electric City."

How many people in these broad United States knew one year ago that there was such a place as Fort Payne? And yet today it is a busy, growing industrial center, known far and wide. And if capital, good judgment, and an unsurpassed public spirit can, with the help of excellent natural resources, assure the future of a community, that of Fort Payne is secure. Fort Payne has come into notice only within the year just closing, but so much has been accomplished here within the twelve months expiring, that it is a difficult task to enumerate the many enterprises matured and projected here within that brief period. It would be enough, perhaps, to say that a hamlet has swelled into a city, the future proportions of which baffle conjecture.

The location of Fort Payne is admirable from every standpoint, whether of health, accessibility, or natural advantages. Situated in one of the most picturesque sections of the Central South, the young city would of necessity invite the notice of the passing traveler.

To come down to facts, Fort Payne is situated in DeKalb county, Ala., on the main line of the Queen & Crescent (Cincinnati Southern & New Orleans & Northeastern Railroads) route, fifty-one miles southwest of Chattanooga and ninety-one miles north of Birmingham. The site of the city is from 900 to 1,600 feet above the level of the sea, a height at which malaria is unknown. The city owes its growth and brilliant prospects to the singularly enterprising spirit of the Fort Payne Coal & Iron Co., an association composed mainly of New England gentlemen, J. W. Spaulding, president; D. H. Goodell and Henry B. Peirce, vice-presidents; C. L. T. Stedman, secretary; and C. O. Godfrey, general manager, with a solid board of directors. The company has a capital stock of \$5,000,000.

De Kalb county is entirely free from debt, taxes are light and the Fort Payne Co. offers every reasonable inducement for the locating here of industrial plants, for which the vast stores of iron, coal, other minerals and timber afford inexhaustible and ready supplies. Coal, iron and limestone can almost literally be picked up and dumped into the furnaces, while timber simply awaits cutting and sawing. "This is an extraordinary assertion," doubtless some may say. Well, come and prove its truth, as the backers of Fort Payne and every visitor here have done, and doubt will give way to knowledge.

"But what of this prodigy in the way of town-building? What is its status and what are its prospects?" By way of answer, one may remark that it is a live, go-ahead, confident, earnest community of several thousands souls, who are persuaded of the city's future by the results of its brief but remarkably progressive past.

When New Englanders, under the lead of W. P. Rice and Dr. J. M. Ford, organized the Fort Payne Coal & Iron Co., there was a rush for its stock, and subscriptions were received from nineteen hundred people. That was only about a year ago. Fort Payne was then only a struggling country village of a hundred or so inhabitants. Backed by an abundance of capital and an unlimited energy, this company has already made this town one of the centers of Southern industry. It is well known as the "the New England City of the South," for it is a product of New England men and money working on Southern resources as a



foundation. What has been accomplished? is an important question.

From an official circular of the city I take the following: "Some of the following are complete and working while the others are under way and will be pushed to speedy finish:

Fort Payne Furnace Co., capital \$200,000; will get into blast February 22.

Fort Payne Rolling Mill, capital \$300,000; will be in operation in early spring, and will manufacture basic steel.

Fort Payne Water Works, capacity 2,000,000 gallons per day; pure spring water, supplying 100 residences now and adding to them as fast as work can be done.

Fire Clay Works, the best in the South will be in operation in ten days.

Electric Light Co., filling a contract with the city for 25 lights for a term of 11 years, has been in operation over a month, adding the incandescent system for private dwellings at present.

Southern Paving Co., capital \$40,000; will begin operations immediately.

Fort Payne Stove Works, owned by Coal & Iron Co., are making stoves already for home and shipment.

Ice and Storage Company in full operation, supplying the city with finest ice.

Carriage factory in full operation; doing a fine business.

Malleable iron works, with a capital of \$40,000, all taken up.

The F. H. Foster Builders' Hardware Company will move their entire plant from Cincinnati, bringing with them 500 workmen, making Fort Payne the coming business center of this valley.

The Duebin-Hubbard Manufacturing Company has laid the foundation for large tool works."

As though these enterprises were not enough for one town to establish in less than a year, three other furnaces are now practically assured, giving Fort Payne four iron furnaces within the next twelve months.

Two fine hotels, large business houses, and hundreds of dwellings have been erected, but there is an urgent demand for more dwellings. It is estimated that 1,000 houses will be required within six months to accommodate the people who are needed to operate the works now building. At least 3,500 mechanics will find employment in the enterprises already definitely secured, and conservative estimates place our population at about 15,000 by the end of 1890 or early in 1891.

THE laws of trade are laws of nature. That articles of human consumption and use will be made where they can be made cheapest is as true as that water will seek its level. In the South there are possibilities of economy in manufacture that exist in no other part of the Union, and the South will inevitably wield the sceptre of industrial supremacy.

As a source of information on Southern industrial, railroad and financial topics the MANUFACTURERS' RECORD is without an equal.

THE South is every year shipping less and less of its cotton away to be manufactured elsewhere. The textile industry is moving South. Where the cotton grows there it will be manufactured.

THERE is only one way to keep accurately informed as to the progress of the South's development. That way is to read the MANUFACTURERS' RECORD regularly.

## First National Bank,

MIDDLESBOROUGH,

KENTUCKY.

CAPITAL \$50,000.

SPECIAL ATTENTION PAID  
TO COLLECTIONS.

## HIBERNIA NATIONAL BANK, OF NEW ORLEANS.

UNITED STATES DEPOSITORY.

Pa'd up Capital, - - - - - \$300,000  
Surplus and Profits, - - - - - 185,000

Particular Attention given to Collections for  
Distant Banks and Bankers.

### CORRESPONDENTS:

New York, Hanover National Bank, Importers  
and Traders National Bank.  
St. Louis, Mechanics Bank.  
Shreveport, La., Commercial National Bank.  
London, Eng., Consolidated Bank (limited).

### DIRECTORS:

ANDREW STEWART, JOSEPH W. STONE,  
H. M. PRESTON, THOS. GILMORE,  
G. R. WESTFELDT, JOHN G. DEVEREUX,  
GEORGE R. PRESTON.

GEORGE R. PRESTON, PRESIDENT,  
JOHN G. DEVEREUX, VICE PRESIDENT,  
CHARLES PALFREY, CASHIER.

HENRY C. BURR, Pres't, A. SCHEUERMAN, V. P.  
J. G. RHEA, Cashier.

## City National Bank, GRIFFIN, GA.

Capital paid ..... \$56,000  
Surplus..... 50,000

New York correspondent: Merchants Exchange  
National Bank. Special attention given to  
collections on all accessible points.

## The People's Bank, OF DARLINGTON, S. C.

Capital paid up - - - \$100,000.

SPECIAL ATTENTION PAID TO COLLECTIONS.

E. KEETH DARGAN, W. A. CARRIGAN,  
President, Vice President,  
H. L. CHARLES, Cashier.

Legh R. Watts, Pres't. J. L. Billisely, Cashier.

Established 1867.

## BANK OF PORTSMOUTH, PORTSMOUTH, VA.

Paid-Up Capital \$100,000.

Transacts a General Banking Business. Solicits  
Accounts of Banks, Bankers, Corporations, Mer-  
chants and Individuals.  
Collections made on all accessible points in Vir-  
ginia and North Carolina.  
Remittances made on day of payment at the low-  
est rates. No extra charge for Norfolk, Rich-  
mond, Petersburg and Suffolk.

A. P. WOOLDRIDGE, WM. VON ROSENBERG,  
President, Vice President.  
M. C. MILLER, Cashier.

## City National Bank.

U. S. DEPOSITORY.

Capital \$100,000. Surplus \$50,000.

AUSTIN, TEXAS.

## City National Bank, CORSICANA, TEXAS.

R. E. PRINCE, - President.  
ABM. S. UNDERHILL, J. H. MARTIN,  
100 Broadway, N. Y., V.-Pres. Cashier.

The Largest Bank in Central Texas.

Collections a Specialty.

Cash Capital, - - - \$300,000.

W. H. BOGLE, Pres't. J. L. GRIGGS, V. P.  
R. W. JONES, JR., Cashier.  
(INCORPORATED).

## Merchants' & Farmers' Bank, -OF- MACON, MISS.

Capital paid up . . . \$50,000.  
Undivided Profits . . . 7,000.

Prompt and careful attention will be given to  
any business you may have in this  
section if entrusted to us.

H. C. HERNDON, Pres't. W. H. HUNT, Cashier.

## The Bank of Oxford OXFORD, N. C.

CITY and COUNTY DEPOSITORY.

We Pay Special Attention to Collections.

Oldest and Strongest Bank in Granville County.  
Situated in heart of "Golden Tobacco Belt."

B. B. VAUGHAN, Pres. J. H. CABANISS, Vice-Pres.  
CARTER R. BISHOP, Cashier.

ORGANIZED JUNE, 1886.

## The National Bank, PETERSBURG, VA.

The only National Bank in South-side Virginia.

DIRECTORS: C. M. Fry, New York. B. B.  
Vaughan, J. H. Cabaniss, R. E. Hill, T. S. Beck-  
with, R. B. Davis, James Sloan, Jr., Baltimore,  
W. M. Habliston, Charles Cohen, W. H. H. Bag-  
well, E. A. Hartley.

H. J. LAMAR, Pres't. GEO. B. TURPIN, V.-Pres't.  
J. W. CABANISS, Cashier.

Established 1870.

Capital, \$400,000. Surplus, \$130,000.

## The Exchange Bank MACON, GA.

New York Correspondents—Hanover National  
and Mercantile National Bank.

Collections solicited from Banks, Bankers and  
Merchants. Remittances made at the  
lowest rate of Exchange.

J. E. D. SHIFF, Pres. JOS. E. BIVINS, Cashier.

## Bank of Cordele.

"Cordele, the Magic City of the Pines."  
A STATE DEPOSITORY.  
CORDELE, GA.

## —THE— National Farmers & Planters Bank OF BALTIMORE.

Capital, - - - \$800,000.00  
Surplus and Profits, 608,571.56

### DIRECTORS:

Enoch Pratt, David L. Bartlett, Francis White,  
J. Alex. Shriver, Philip T. George, Chas. T. Boehm,  
R. Curzon Hoffman, John A. Whitridge, H. Irvine  
Keyser, Henry Jones.

ENOCH PRATT, RICH'D CORNELIUS,  
President, Cashier.

ACCOUNTS OF INDIVIDUALS AND  
CORPORATIONS SOLICITED.

## C. W. BRANCH & CO. Bankers and Brokers, RICHMOND, VA.

Stocks and Bonds bought and sold for cash  
or on margin.

### SOUTHERN IRON STOCKS A SPECIALTY.

Private wires: Washington, Baltimore, Phila-  
delphia, New York, Boston and Chicago.

New York correspondents: Prince & Whitely  
and Green & Bateman.

S. H. DENT, President. E. B. YOUNG, Cashier.  
E. Y. DENT, Assistant Cashier.

## Eufaula National Bank, EUFULA, ALABAMA.

Capital, \$100,000. Surplus and Profits, \$50,000.

Collections and Correspondence solicited.

New York Correspondent:  
American Exchange National Bank.

W. L. CHAMBERS, Pres't. J. M. HAMILTON, Cash'r.  
A. K. KELLER, V.-Pres't. C. H. ABBOTT, A. Cash'r.

## Bank of Commerce, SHEFFIELD, ALA.

Capital, - - - \$150,000.

We give special attention to collections,  
and have a large and growing list of par  
points.

J. McCLAIN, President.  
W. J. MARSHALL, V.-Pres.  
C. T. STARLING, Cashier.

## FARMERS BANK Capital, \$350,000.

Collections promptly remitted at lowest rate.  
Bank of America, N. Y.; First Nat'l. Bk., Chicago.

T. L. BIRD & CO., BANKERS,  
Middlesborough, Ky.

— WILL BE SUCCEEDED BY —

## THE CUMBERLAND GAP BANK

After January 1, 1890.  
COLLECTIONS A SPECIALTY.

Harvey Fisk & Sons, New York. Clifton, Rhodes,  
Barrett & Co., Louisville, Ky.

## A. N. WOOD, General Banking Business GAFFNEY CITY, S. C.

Collections and Exchange a Specialty.

Chas. N. Rix, President. W. E. McRae, Vice-President.  
Chas. K. Gilman, Cashier.

## CAMDEN, ARKANSAS. CAMDEN NATIONAL BANK CAPITAL, \$50,000.00.

Collections Promptly Remitted at Lowest Rates.  
CORRESPONDENTS: Chemical Nat. Bank, New York; First  
Nat. Bank, Chicago; Levee Bank, St. Louis.

## Surplus Money

Will return large dividends if invested in cheap  
MEXICAN AND TEXAS LANDS.  
FOR SALE—600,000 acres in one body.  
Smaller tracts if desired. Mercantile and Land  
Law specially attended to.

Eugene Williams, Attorney at Law, Waco, Tex.

# The Athens Iron Co.

ATHENS, TENN.

INCORPORATED JUNE 17, 1889.

CAPITAL STOCK, \$500,000.00

Par Value of Shares, \$100.00

The following properties, concessions and franchises are assets of the furnace company, not as a subscription, but they have been granted in full directly to the company, viz:

A furnace site of twenty (20) acres, bordered by a good stream of pure water and by the Nashville & Jellico R. R., in the borough limits and quarter of a mile from the East Tennessee, Va. & Ga. R. R. Valued at \$20,000.

Twelve hundred (1,200) town lots located on the East Tennessee, Va. & Ga. R. R., and on wide streets. Elevated and beautifully located, giving a view therefrom of the Great Smoky Mountain Range. Valued at \$250,000.

A twenty years' lease of three and one-half miles of the Starr's mountain hematite iron ore, and one-quarter mile of the fossil ore measure. Valued at \$50,000.

The hematite ore measure averages 80 feet thick, and it averages 54 per cent. metallic iron. The fossil measure averages over 8 feet thick and contains an average of 51 per cent. metallic iron. These ores can be mined and delivered at the furnace for 85 cents per ton.

## CAPITAL IS DESIRED

to Erect and Operate a

## BLAST FURNACE

of 100 or more tons capacity

A large part of the stock therefor has been subscribed.

About Fifty Thousand more is wanted to complete the enterprise.

The subscription books will be opened until said amount is secured.

It is estimated that pig iron can be produced at a cost of \$8 per ton, and will not cost over \$9 per ton with ordinarily good management.

The railroad facilities of Athens are not surpassed by any point in the South.

Further and more definite information may be obtained by inquiry of

JAS. D. KASE, President,

Danville, Montrose Co., Pa.

## J. D. KASE,

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### SPECIALTY:

Examinations of Coal, Iron and Mineral Lands.

Reports on Resources of Railway Routes.

Private Examinations of Mineral Lands for Individuals Prior to Investment.

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## H. M. CHANCE,

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### SPECIALTY:

Examination of Coal, Iron, and Mineral Lands. Reports on Resources of Railway Routes. 418 and 420 DREXEL BUILDING, Philadelphia.

### For Owners of Timber and Mineral Properties.

Surveying and Mapping of large bodies of timber and mineral lands is done carefully as a specialty by

MAX ADOLF NAEFF,

417 N. 7TH STREET, PHILADELPHIA.

West Virginia Coal and Timber Lands for Sale on hand.

### NEW BUSINESS EMPIRE

For Manufacturers, Capitalists, Merchants & Home Seekers

NASHVILLE, TENN.

The Agricultural Garden Region, Educational Center, Mineral Gateway and Business Metropolis of the Southern States. Nashville is today the most prosperous city in America. Climate, Social and Educational conditions unequalled. 13 hours from Chicago; 31 from New York, and 8 from Cincinnati.

ADVANTAGES.—Accessibility to the World's great trade centers on the highway of the Louisville & Nashville Railroad between New York and New Orleans. The same inducements now to investors as offered by Chicago 30 years ago.

Openings for the honest Industrial Classes, who desire near-by Climatic, Educational and Employment Advantages, not obtainable in remote sections.

Responsible Parties may address,

Nashville Land Improvement Co. NASHVILLE, TENN.

N. B.—Superior openings for Manufacture and Capitalists. 5000 Houses wanted for paying tenants.

A. E. Drought, Pre t. Kinsman City Bank, President. Jno. M. Lee, Clk. Circuit Court, Oseola County, Secretary.

### —FLORIDA—

The Oseola County Abstract Company, KISSIMEE CITY, FLORIDA.

Abstracts to Titles of Land Furnished. Taxes Paid for Non-Residents. Loans Negotiated.

Correspondence of Capitalists and others solicited. References: First Nat. Bank, of Orlando, Fla.; Hamilton Dinston, Esq., Philadelphia, Penna.

### Mineral, Timber, Farm Lands

For sale in the celebrated iron ore district of York and adjoining counties of South Carolina. Properties examined, reported upon and purchased at reasonable commissions.

Address J. W. THOMPSON, Proprietor Merchants' Hotel, Blacksburg, S. C.

REFERENCES.—Col. R. A. Johnson, Gen'l Mang. C. & C. R. R., 45 Broadway, New York City; Major Jno. F. Jones, Gen'l Supt. C. & C. R. R., Blacksburg, S. C.; Gen. John T. Wilder, Johnson City, Tenn.

## 500 Per Cent. in Land.

2,500 acres, lying west. Adjoining city limits at Augusta, Georgia. The largest cotton manufacturing city in the South. High rolling land, joining F. J. Berckman's extensive nurseries—the only available land for city extension. Only needs rapid transit to become at once saleable at \$500 to \$1,000 per acre. Can be bought now at \$50 to \$100 per acre in part or whole. No finer suburban lands in the South.

Investors and builders of suburban railways invited to investigate this field for development of profitable enterprise. Address

J. H. ALEXANDER, Augusta, Ga.

Do you want to make 500 per cent. on your money in the next 12 months? Write to

W. S. DECKER,

The Panhandle Land Agent,

CANADIAN CITY, HEMPHILL CO., TEXAS.

For his price list of CHEAP TEXAS LANDS. Attorney at law and ex-county surveyor. Refers to Traders' Bank.

### FOR SALE.

300,000 Acres Finest Timber & Mineral Land

in the South, and 150,000 Selected Yellow Poplar and White Oak Trees. Freight low; property cheap. Choicest section of the South.

Address, N. B. DOTIEN,

Wise C. H. Wise Co., VIRGINIA.

W. B. BURROUGHS,

Real Estate Agent, BRUNSWICK, GA.

Offers choice bargains in Pine Lands and Mill Sites in City Property and country farms. Special attention paid to any business entrusted to my care. References, City National Banks.

### INTERSTATE

Building and Loan Ass'n Of Dallas, Texas—709 Main St.

Large profits to investors. Cheap money for borrowers. Motto: Security, Punctuality and Profit.

Mortgage Loans & County Bonds

—IN THE—

SOUTHERN STATES.

FRANCIS SMITH, CALDWELL & CO.

San Antonio, Texas and Memphis, Tenn.

### TO INVESTORS. TO INVESTORS.

The Savings & Investment Co. Of Chattanooga, Tenn.

\$38,000 subscribed, payable \$1 per month each share.

First Quarterly Statement: For Information, write Assets Sept. 31, '89, \$5,506.88 Sumter Cogswell, Manager. Liabilities 4,961.66 S. J. Dunn, Pres't. C. C. Righter, Treas.

Surplus.....\$ 545.22 CHATTANOOGA, TENN.

We average about 25 per cent. on investments. Absolute security. Write for information. You can afford \$1.00 per month each share. We have several bankers and capitalists among our shareholders, and others worth millions, from all sections of the country. Take a few shares. It will pay you. Chattanooga is the coming Southern City. Our investments are all in real estate in Chattanooga and suburbs.

### COMMONWEALTH

Loan and Trust Co.

131 Devonshire St., Boston, Mass.

CAPITAL, - - \$100,000

Paid into the Treasury in Cash.

Surplus \$25,000.

We keep constantly on hand and for sale

7% GUARANTEED FIRST MORTGAGES

From \$200 upwards.

6% DEBENTURE BONDS

Secured by FIRST MORTGAGES ONLY,

\$50, \$100, \$200, \$500 \$1,000.

W. W. MASON, TREASURER. C. A. PARKS, PRESIDENT.

### SAFE INVESTMENTS.

The Western Farm Mortgage Trust Co Incorporated 1880.

Capital Paid in (cash), - - - - - \$1,250,000 Surplus and Undivided Profits, - - - 123,000

Selected First Mortgages in Denver, Col.; Hutchinson, Kan.; Kansas City, Mo.; Seattle, Tacoma, Elensburg, Wash. and other large cities.

Principal and interest guaranteed. Insurance for full amount of loan.

Correspondence or personal inquiries solicited.

F. B. ROGERS, Manager.

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OPELIKA, ALA.

GENERAL PRACTICE. MORTGAGE LOANS.

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Stock in a Yarn Mill.

favorably located and running on large orders at a fair profit. Satisfactory reasons for selling. Good opportunity for a superintendent or boss spinner. Investigate.

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Correspondence Solicited.

### 500 FINE CITY LOTS

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In one of the best portions of the city, in easy access to water and all depots; will sell on reasonable terms. Address

IKE T. JOBE,

Mayor of Johnson City, Tenn.

W. R. BURGESS, Greensboro, N. C.

Steam-Power Plants, Locomotives

Complete outfits for Saw and Planing Mills, Carriage, Wagon and Furniture Factories. Patent Dry Kilns. Heating and Ventilating of Cottou Mills. Automatic Sprinklers. Best goods and lowest prices guaranteed.

Stocks and B'n's not listed on any of the exchanges bought and sold by

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BANKER,

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Hot Springs, North Carolina.

LUXURIOUS AND FINELY-APPOINTED BATHS IN THERMAL WATER.

A specific in all cases of rheumatism, gout, sciatica, dyspepsia, nervous exhaustion and blood and skin diseases.

A perfect climate, even temperature, dry air. Easily accessible from all points. Through Pullman car from New York and through Maine car from Cincinnati daily.

### THE MOUNTAIN PARK HOTEL.

First-Class in all Appointments.

Unexcelled in Cuisine.

WILLIAM G. DOOLITTLE,

Formerly Manager Spring House, Richfield Springs, N. Y.

## Upton Court

An Old Fashioned Southern Home, for Northern

Health, Comfort and Pleasure Seekers. Beautifully situated in the Piney Woods, within half a

mile of railroad station, telegraph and post-office.

No enervating influences. No malaria. Dry,

balmy, bracing air.

For references and terms, address

Mrs. Roger Griswold Perkins,

CAMDEN, S. C.

## THREE C'S HOTEL,

T. W. CLAWSON, Proprietor.

YORKVILLE, S. C.

Special attention paid to Tourists, Hunters and Commercial Travelers.

TERMS, \$2 PER DAY.

## The Hobkirk Inn,

CAMDEN, S. C.

Persons seeking a mild, dry, piney-wood climate for the winter, and desiring the comforts of a thoroughly well appointed house, under Northern management, address as above. Eighth season. Illustrated circulars. F. W. ELDREDGE, Manger.

## Young's Hotel.

EUROPEAN PLAN.

BOSTON,

Opposite Head of State Street.

J. REED WHIPPLE.

Entrance for Ladies, Court Street.



Agents wanted by NORTON DOOR-CHECK AND SPRING CO. Room C, Sears Building, BOSTON, MASS.

Keep up with the times by using

Mentzel's Coin Wrappers.

GUMMED READY FOR USE.

MENTZEL & SONS.

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# W. M. SCOTT & CO.

## Real Estate Agents,

Mineral Properties, Pine Lands, City Property and Farms.

MONEY LOANED TO NET 8%

W. C. HARKEY, { City Property. E. D. L. MOBLEY, { J. D. CALDON, Mineral Property.  
R. H. RANDALL, { Rent Department. JOHN LOFTON, Timber Tracts.

Office Adjoining Kimball Entrance,  
ATLANTA, GA.

Herewith we give a list of some of our Choicest TIMBER, IRON AND MARBLE PROPERTIES:

**29,000 ACRES OF CHOICE HARDWOODS, White Oak, Cherry, Poplar, Chestnut Oak and other Hardwoods.**—The property lies in the counties of Gilmer, Fannin and Murry, North Georgia. Well watered, on good logging streams and in the midst of the North Georgia Mineral Belt. When cleared this land will all make good farms. Timber experts report that many of the trees are five feet in diameter and that no finer tracts of timber lands were ever examined by them. Abstract of titles in our office made by one of the best attorneys in this State. Price only \$3 per acre. Railroads will soon cross this territory. There is 500 per cent. in this property. No options given.

**38,000 ACRES OF VIRGIN PINE LANDS, Solid Body.**—With five and a-half miles of double railroad front, every acre of which will cut from 6,000 to 7,000 feet of merchantable stuff. This property is as fine a piece of Timber land as can be found in the South, price \$1.50 per acre. In less than five years it will bring 500 per cent. profit. Larger tracts of pine lands that are accessible are being rapidly picked up. Now is the time to invest. Already this territory is being rapidly filled up by large saw mills, whose owners are coining money rapidly.

**30,000 ACRES VIRGIN YELLOW PINE,** in South Alabama, on good rivers, lying on both sides of two good streams, only \$1.25 per acre.

**GEORGIA PINE.**—We have a number of choice small tracts—from 1,000 to 3,000 acres—from \$1.50 to \$2.25 per acre. These are choice small investments. Fortunes are now being realized and greater fortunes will be realized by those who judiciously invest. No booms to explode. Timber lands in the South at present low prices are far better as an investment for your wife and children than Life Insurance, Government Bonds or Stocks. Investigate this subject carefully. \$10,000 invested now will return \$80,000 within five years. No danger from forest fires. Taxes are nominal. Protection by State laws against depreciation is thorough and vigorous.

**1,650 ACRES MANGANESE.**—This deposit of ore is equal in quality to the Spanish Manganese, analysis by three eminent chemists showing 56½ per cent. of metallic manganese, 3 per cent. of metallic Iron and 31-1000 of phosphorus. Inexhaustible in quantity—being a vein—and three miles in length, lying in place from six to eight feet thick at surface, widening as gone down upon. Shafts have been sunk in many places. No other deposit can be found in this country equaling this in extent or quality. All we ask is a thorough investigation.

A vein of GENTHITE or NICKEL runs parallel with the manganese across the entire property. Specimens from depth of 12 feet shows 3 89-100 per cent. metallic nickel.

CHROME IRON in vast quantity is also found on the property, as well as CORUNDUM and ASBESTOS, making it the most wonderfully rich piece of mineral property that we know of in the world.

**WHITE STATUARY MARBLE—720 ACRES** in Valley River valley, and on the line of the Western North Carolina Railroad and the extension of the Marietta and North Georgia Railroad, 13 miles beyond Murphey, on which are four distinct and well defined veins of marble running across the property for three-quarters of a mile. Sufficient water-power for marble works at hand; two railroads being constructed will cross the beds; no expense necessary for tramways or railroads; both railroad surveys cross the beds about the center of the property. In Georgia, and in fact nearly all, marble companies are compelled to spend more for marketing facilities than we ask for the property with all these advantages now at hand.

VEIN NO. 1 is of pure WHITE STATUARY, superior in texture to that of Vermont, and hardly distinguishable from the Italian. The demand for such quality of marble cannot be supplied. Its uses are being multiplied every day and the older deposits are now nearly exhausted. The cost of mining marble in Vermont, where it is now necessary to go to a depth of eighty to ninety feet, far exceeds that of this deposit, where marketable marble lies within one to five feet of the surface.

VEIN NO. 2 is a handsome white statuary marble slightly tinted with blue, takes an excellent polish and will command a ready market at fancy prices.

VEIN NO. 3 is a coarse white, crystallized, suitable for furniture and inside finishing for buildings. The color is an absolutely pure white.

VEIN NO. 4 is a gray, crystallized marble, closely resembling Aberdeen granite—hard, firm and one that we believe will stand a great amount of exposure. The color is rare. The stone susceptible of fine polish. This alone should command the price we ask for the property.

This is the only property having deposit of statuary marble now known in the South. No quarry in the country possesses more natural advantages or is susceptible of greater improvement at so little expense. Railroads at hand without one dollar of expense, sufficient water-power for all purposes, cheap labor, cheap freights, no danger of strikes, a climate where work can be carried on in all seasons, and only a small outlay necessary to commence operations.

This property has been thoroughly gone down into with diamond drill. Samples of marble at our office. Fulltest investigation invited.

**MARBLE PROPERTIES.**—Write us for description.  
For investment, speculation or information write us.

# W. M. SCOTT & CO.

9 Kimball House Block,

ATLANTA, GA.

W. A. HEMPHILL, PRESIDENT.

JACOB HAAS, CASHIER.

# CAPITAL CITY BANK.

• CAPITAL AND UNDIVIDED PROFITS, \$450,000. •

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SOLICITS THE ACCOUNTS OF BANKS, BANKERS, INDIVIDUALS AND CORPORATIONS.

New York Correspondent—Chemical National Bank.

# DENISON, TEXAS.

THE

Future Manufacturing and Commercial Center

OF THE

# GREAT SOUTHWEST.

Denison Supplies the Coal for Texas.

She has at her gates the only **COKING COAL** of any value in the Mississippi Valley. To the Southwest lies the best **MAGNETIC IRON ORE** in the world, while to the north and southeast are fields of **BROWN HEMATITE ORE** of the finest grade. These ores must meet the **COKE** and **COAL** at **DENISON** and there be worked.

**DENISON** cannot be surpassed for **HEALTHFULNESS** and **BEAUTY** of location. Six divisions of railways terminate at Denison and are operated by her citizens.

**DENISON** has an abundant supply of pure, soft water and plenty of good, cheap **BUILDING MATERIAL**.

The attention of investors and those seeking advantageous locations for business or for manufacturing plants is invited to the opportunities presented at Denison.

**MUNSON & BRO. HAVE SUPERIOR FACILITIES FOR THE SAFE AND PROFITABLE INVESTMENT AND HANDLING OF CAPITAL.**

For information about **DENISON** and for bargains in **BUSINESS** and **RESIDENCE PROPERTY**, **ACRE PROPERTY** and **FARMS NEAR THE CITY**, write or call upon

# MUNSON & BRO.

301 WOODWARD STREET,

DENISON, TEXAS.

# Stephen Harnsberger & Co.

## FLORENCE, ALABAMA.

Transact Business for Non-Residents and Capitalists, Assist Manufacturers in Securing Favorable Locations, Aids in the Organization of Stock Companies, Etc.

Correct information given in regard to new towns and their resources and advantages, also in regard to mineral, timber and other lands.

REFERENCES: A. Gault, President Florence National Bank; Henry Walker, Cashier National Valley Bank, Staunton, Va.; E. B. Comley, General Manager Florence Land, Mining & Mfg. Co.

# BONDS OF SURETYSHIP

For Officials and Employees of Banks, Railroads and other Corporations and Business Firms occupying Positions of Trust.

## The Fidelity and Casualty Company of New York,

— 214 and 216 Broadway, New York. —

CAPITAL \$250,000.00.

ASSETS OVER \$1,000,000.

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INSURES  
YOUR CHECKS,  
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Against  
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YOU NEED IT.

Every Machine  
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TRY IT.

Patented  
APRIL 23,  
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INDICATES  
The Currency of  
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Machines Sent  
on Approval to  
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The Best in Use.  
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Performing Cancel Stamps of any design made to order. ABBOTT MACHINE CO., 51 & 53 W. Washington St., CHICAGO, ILL.

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ALBERT L. BECK.

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• REAL ESTATE, •

No. 1 Marietta St., Cor. Peachtree,

ATLANTA, GA.

Buy, Sell, Rent and Exchange Real Estate on Commission. Have for Sale and Exchange Farms, Timber and Mineral Lands, Mills, Gold Mines, and all classes of Real Estate in city and country. Orders filled for large tracts Pine and Hardwood Timber Lands. Calls and correspondence solicited.

## Southern Investments

We deal in all kinds of Stocks, Bonds and Miscellaneous Securities. Have Listed For Sale, Mineral and Timber Lands, and Farm Tracts. Correspondence solicited. Reference: The Bankers of Nashville.

**A. L. LANDIS & CO.**

Brokers, Nashville, Tenn.

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## CHATTANOOGA

## Investment, Loan & Banking Company

General Managers East Chattanooga Land Company.

General Real Estate Business, Loans and Discounts.

CAPITAL, \$100,000.

MAIN OFFICE 24 WEST NINTH STREET (Telephone 320)

96 Summer Street, Boston.  
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CHATTANOOGA, TENN.

## To Manufacturers.

## Arkansas Investments.

FREE SITES and Coal 25 cents per ton to manufacturers desiring location in the Southwest. Cotton, Timber, Limestone, Iron, Coal Lands and Town Lots for Sale. Investments made for non-residents.

### HUNTINGTON,

Sebastian County, of two years' growth. Population over 2,000. Lies in the heart of the mineral district. Correspondence solicited.

A. L. RAYMOND, General Agent,  
Huntington Town Co., Huntington, Ark.

INVESTMENT COUNSELLORS,

BROKERS IN TIMBER,

MINERAL

AND

COAL LANDS.

SPLENDID PROPERTIES

Always in Hand  
or Controllable.

ESTATES MANAGED.

**STORK & COOK.**

Bank of Baltimore Building, BALTIMORE, MD.

## The People's National Bank

MARTINSBURG, W. VA.

DESIGNATED DEPOSITORY OF THE UNITED STATES.

CONDENSED REPORT OF SEPT. 30, 1899.  
RESOURCES.



THE PEOPLE'S NATIONAL BANK BUILDING

Loans and Investments ..... \$218,803.87  
U. S. Bonds, 4 per cent. .... 88,750.00  
Due by Nat'l Banks and Reserve Agts. 51,513.26  
Banking Building and Fixtures ..... 18,500.00  
Expenses ..... 572.95  
Cash on hand ..... 29,774.62

Total ..... 407,914.70

### LIABILITIES.

Capital Stock ..... \$55,000.00  
Surplus and undivided Profits ..... 25,290.09  
Circulation outstanding ..... 11,250.00  
Deposits ..... 316,374.61

Total ..... 407,914.70

SPECIAL ATTENTION PAID TO COLLECTIONS OR ANY BUSINESS ENTRUSTED TO OUR CARE.

## HYGEIA HOTEL, Old Point Comfort, Va.



THE ATTENTION of all persons in search of health, comfort, pleasure or recreation is respectfully called to the HYGEIA HOTEL, OLD POINT COMFORT, VA. Situated in latitude 37, with a mean temperature for winter of 47, at the confluence of Chesapeake Bay and Hampton Roads and within a few miles of the sea and the Gulf stream, Old Point Comfort possesses extraordinary climatic advantages.

The sanitary records of the place have been kept since 1817 with absolute fidelity, and during that period not a single case of diphtheria, scarlet or typhoid fever, or malarial trouble, has originated at the Point, while the absence of lung trouble has been so marked as to obtain special mention in the report of every surgeon stationed at Fortress Monroe, the adjoining post.

Nowhere else on the Atlantic coast is there to be found a spot where the climate varies so little with the seasons, and approaches so rarely to the extremes of either heat or cold.

The advantages of the Hygeia Hotel are too numerous to describe. All the comforts the heart could wish, or the most fastidious exact, are provided. Its Turkish, Russian, electric and hot sea baths, and glass enclosed verandahs, are features as beneficial as they are unique. The scenery from the verandahs over a broad roadstead occupied by vessels of every description and all nationalities, varied by frequent naval manoeuvres, is sublime almost beyond description.

The Artillery School and Garrison, with its interesting parades, guard-mounting, exercises and drills, the grand hotel pavilion, where nightly hops and afternoon concerts by the Artillery School Band take place; beautiful drives over smooth shell roads through a country replete with picturesque and historic scenes, are attractions, in a collective sense, enjoyed at no other pleasure or health resort.

Persons suffering from nervousness and insomnia are quickly, and, in most cases, permanently relieved. An illustrative descriptive pamphlet and terms will be furnished upon application to

**F. N. PIKE, Manager.**



# NORFOLK & WESTERN RAILROAD COMPANY.

TO THOSE LOOKING FOR

## Manufacturing SITES

✧ — IN THE SOUTH. — ✧

The most desirable locations in the South for manufacturing wagons, stoves, agricultural implements, furniture, or for foundries, machine shops, rolling mills, muck bar mills, nail works, glass works, cotton or woolen mills and tanneries are to be found in Virginia along the line of the Norfolk & Western Railroad from Norfolk to Bristol, and upon its branch lines. Hard wood of every variety; pig iron from the furnaces at Lynchburg (2), Roanoke (2 in operation and 1 now under construction), Pulaski (1), Ivanhoe (1), Radford (1, to be built in 1890), Salem, Graham and Max Meadows (1 at each point now under construction); bar iron from the rolling mills at Roanoke and Lynchburg; coke and semi-bituminous coal from the Pocahontas Flat Top field; superior gas coals from mines on the Clinch Valley extension; glass sand from Tazewell county; cotton from the markets of the Southern States, and wool from all the Western and Southwestern States and Territories at advantageous freight rates. Favorable freight rates made upon raw materials to all factories established upon its line, as well as to points in the United States and Territories upon the manufactured articles

Those seeking new fields for manufacturing establishments should not fail to investigate the wonderful development in iron, coal and coke industries that has been made within the past five years along the line of the Norfolk & Western Railroad, and the advantages offered by the State of Virginia, in the supply of cheap raw materials; by the Norfolk & Western Railroad in the matter of freight facilities and rates upon raw materials and for reaching home, far distant and foreign markets, and by the cities and towns along its line in the way of advantageous sites at moderate cost. Many of the cities and towns exempt manufacturing establishments from taxation for a series of years.

For further information as to freight rates and sources of supply of raw materials, apply to A. Pope, General Freight Agent, Roanoke, Va., or to

**CHARLES G. EDDY,**

Vice-President, ROANOKE, VA.

# 200,000,000 TONS OF BROWN IRON ORE

IN SIGHT AT

## BLUFFTON,

HIGH, HEALTHY AND HONEST.

GOOD PEOPLE AND GOOD WATER.

Cherokee County, Ala.

LOCATED UPON THE ALABAMA DIVISION OF THE EAST TENN. VA. &amp; GA. RY. SYSTEM.

It is impossible to describe by words the enormous quantity of iron ore that is in sight on the land of this company. Said a prominent railroad man of the South: "I could not believe your statement as to the quantity, (200,000,000 tons in sight), but now that I have seen your ore deposits, I wonder how you put so low an estimate on them."

Prof. Robinson, of Bowdoin College, Brunswick, Maine, says: "I found at Bluffton iron ore in abundance, partly in solid cliff masses containing hundreds of thousands of tons, and partly in the form of gravel and small boulders lying in great banks similar in appearance to the gravel banks of New England. Whether there was as much of the gravel as of the bluff ore I could hardly judge, but it was very clear that the quantities of both were simply enormous."

G. S. Patterson, mining engineer, of Anniston, Ala., reports: "The amount of ore in sight was certainly beyond my expectation, though I was prepared to find a large deposit. The Bluff, as it is called, is a solid mass of ore on the side of a mountain, easily approachable, and can be mined cheaper than at any point in Alabama or Georgia, with which I am familiar."

Mr. Wm. H. Edmonds, of the Manufacturers' Record, says: "As to

the quantity of ore here, I don't suppose that all the furnaces in Alabama could use it up in a lifetime."—See Manufacturers' Record May 18, 1889, article entitled "BILL ARP AND BLUFFTON."

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.

With high grade ores, analyzing over 50 per cent. metallic iron, delivered at the furnace at the above-named price, is there any possibility of such a place as Bluffton not being able to produce iron at figures which will yield a profit despite the duldest of dull times?

Prof. J. H. Pratt, of Birmingham, Ala., reports on samples selected from our property by Mr. Edmonds and Mr. G. S. Patterson as follows:

The sample of brown iron ore, marked "Bluff Ore," contains—	The sample marked "Gravel Ore" contains—
Metallic iron, - - - 52.37 per cent.	Metallic iron, - - - 53.23 per cent.
Phosphorus, - - - 0.782 "	Phosphorus, - - - 0.931 "
Silica, - - - 14.60 "	Silica, - - - 6.25 "
Water combined, - 8.10 "	Water combined, - 10.20 "
Moisture at 100° C - 2.50 "	Moisture at 100° C - 1.68 "

### LARGEST DEPOSIT OF IRON

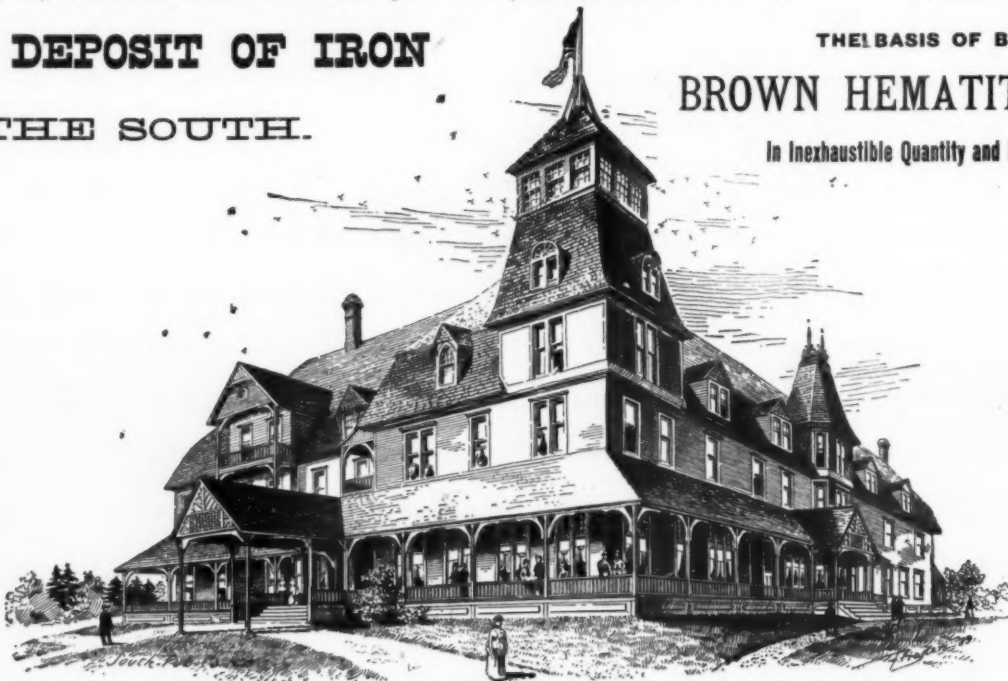
IN THE SOUTH.

THE BASIS OF BLUFFTON:

### BROWN HEMATITE IRON ORE

In Inexhaustible Quantity and Excellent Quality.

Ore can be delivered at furnaces built here at a cost not exceeding 50 cents per ton.



THE SIGNAL—NOW OPEN AT BLUFFTON.

Located on the Selma Division of the East Tennessee, Virginia & Georgia Railway, midway between Rome and Anniston, and only two miles and three-fourths from the East & West Railroad, of Alabama.

## FREE MANUFACTURING SITES.

### Rich Manganese Deposit.

There are several very large and rich outcroppings of Manganese Ore on the company's property, and the deposits have been examined by experts and pronounced exceedingly valuable. Specimens have been sent to various steel works in Pennsylvania, and the result is a large inquiry about the ore. From present development can be seen several hundred tons of this ore. There is always a ready market for manganese, and it is quoted at \$18 to 20 per ton in Pittsburgh and Chicago. More extensive work will be done on these deposits within a very short time, as the banks are easily accessible. Shipments will soon be made.

### OTHER RESOURCES.

#### Fire Clay and Brick Clay—Yellow Ochre.

On this property are large deposits of fire clay, which has stood the highest test. Shipments have been made to Chattanooga, Tenn., and it is pronounced a superior quality. A fire brick works could be established here that would prove extremely profitable.

In brick clay there is an inexhaustible quantity, with an abundance of water running through the clay land. Brick manufacturing here would pay handsomely, and the company would lease the clay beds for a term of years at a very low royalty.

The four charcoal pig-iron furnaces surrounding this property are nearly as valuable to this place as if they were located on the land of the Bluffton Company. The pig iron manufactured by them could be bought and utilized here for every kind of manufactured iron. They are so near that freight on the raw material would be comparatively nothing. Surrounding us, as these furnaces do, it makes Bluffton a centre.

SEND FOR PROSPECTUS. ADDRESS

# Bluffton Land, Ore & Furnace Company, Bluffton, Ala.



# Morristown, Tenn.

## The Plateau City of the Great Valley of East Tennessee

is beautifully located on a plateau of Bay's Mountain, about equi-distant from the Cumberland Mountains which bound East Tennessee on the northwest, and the Alleghany Mountains which bound it on the southeast, and is 300 feet above Holston River, which washes the north base of the plateau three miles from the city. Its mean elevation above sea level is about 1,350 feet, while the hills and mountains immediately surrounding it rise to an altitude of 1,935 feet, affording views of surprising extent and grandeur, and at the same time so modifying the temperature that the thermometer rarely registers higher than 90° in summer or lower than 10° in winter. Its drainage is admirable, and malaria is unknown. It has nearly trebled its population since 1880, having now about 4,000 inhabitants. It is the commercial and business center of the richest and most extensive agricultural district in the State, where all the cereals and all the grasses

and tobacco are grown to perfection, and where fruits and berries abound. It has hundreds of thousands of acres of uncultured forests accessible to it, abounding in Poplar, Pine, Hemlock, six varieties of Oak, Chestnut, Hickory, Cedar, Maple, Birch, Beech, Sycamore, Gum, Locust, Laurel, Buckeye, Mulberry, Ash, Cherry and Walnut. The Celebrated East Tennessee Marble underlies a part of the city, and it is surrounded with rich deposits of Iron Ore, Manganese Ore, Zinc Ore and Lead Ore. It has been said by one who has made a study of the subject, that within a radius of 50 miles around Morristown every variety of iron ore in the United States can be duplicated, and a coke can be made equal to Connellsville coke. We claim without hesitation that Morristown has in its immediate vicinity richer mineral ores, and a greater variety of them, than any city on the Continent.

### MORRISTOWN

has Railroad Facilities equal to any city between Lynchburg and Chattanooga, and they will be speedily increased by the completion of the Carolina, Cumberland Gap & Chicago Railway, making the shortest possible railway route between the great cities on the Ohio River, Cincinnati and Louisville, and the seaboard cities, Charleston, Port Royal and Savannah. Besides, the Baltimore & Ohio Railway will probably extend a branch to it from Lexington, Va., and the Tennessee Midland will in all probability be built to Morristown, and a line be built giving direct connection with Atlanta.



MAP SHOWING RELATION OF MORRISTOWN TO THE COUNTRY AT LARGE.

### MORRISTOWN

has a citizenship composed almost exclusively of native born Americans. It boasts a splendid system of Graded Schools, Five Commodious Brick Churches, the finest Courthouse in Upper East Tennessee, an Opera House that will seat 600 people, two Solid Well Managed Banks, a flourishing Building and Loan Association, two of the Largest Commercial Flouring Mills in the South, Stove Works, an Agricultural Implement Factory, two Woodworking Factories, a Tobacco Factory, a Carriage and Wagon Factory, and many industries of lesser note.

It is lighted with electricity, and has water works under contract, and is now inaugurating a system of street railways. Its climatic advantages, its unsurpassed record for healthfulness, its abundance of pure water, its central and beautiful location, its transportation facilities, its fruitful agricultural surroundings, its contiguity to rich and exhaustless fields of iron, manganese, zinc and lead ores, marble, coal and timber, mark it as a place destined to be the commercial, manufacturing and railway emporium of Upper East Tennessee, Western North Carolina and Southeastern Kentucky.

To expedite this destiny the city authorities have wisely exempted from taxation for ten years all manufacturing establishments that will give employment to fifteen or more persons, and the county authorities have done the like, so that manufacturing establishments will be exempt from all taxation for ten years, except the merely nominal tax for State purposes. There has been no "boom" or inflation of prices at Morristown, and, as it possesses within itself and contiguous to it almost every element of wealth, it now presents the most inviting field for investment of any city in the South.

Persons who may desire fuller information can obtain it by calling on or addressing

## MONTVUE LAND COMPANY

POSTOFFICE BUILDING, — MORRISTOWN, TENNESSEE.

# SALEM, VA.

IN THE ROANOKE VALLEY.

THE SWITZERLAND OF THE SOUTH.

*Its Superior Social,  
Educational and Industrial  
Advantages.*



DUVAL HOUSE—Erected in 1873.

*Salem Improvement Company  
will begin to Sell Lots  
December 11th.  
Manufacturing Sites Free.*

**LOCATION.**—Salem, the county seat of Roanoke county, is in the heart of the Roanoke Valley, celebrated throughout the country for its fertile soil, picturesque mountain scenery and unsurpassed climate. Situated on the Roanoke river, between the Blue Ridge and the Alleghanies, at an elevation of 1,100 feet above the sea. The natural drainage is perfect, there is no malaria and the healthfulness of Salem is proverbial. Salem is central to the Mineral Springs region of Virginia, and is a noted and popular summer resort, the hotels being unusually good.

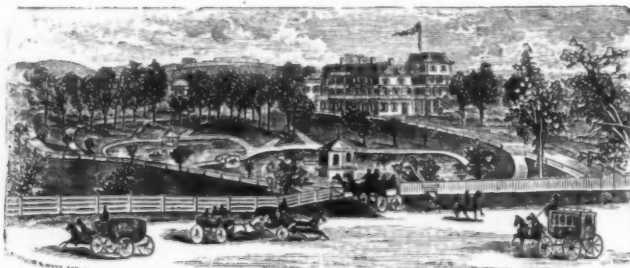
**RAILROADS.**—Salem is on the main line of the Norfolk & Western Railroad, and is the chartered terminus of the Valley branch of the B. & O. Railroad, which is already graded to Salem and which business men claim will soon be completed to this place. A dummy line to connect Salem with Roanoke City (seven miles east) is under contract to be completed by May, 1890.

**WATER WORKS.**—The town owns a complete system of water works, with an abundant supply of pure mountain water. In connection with the water supply an efficient fire department renders property in Salem comparatively safe.

**POPULATION.**—Salem has a population of about 2,500, and is justly noted for the

**NEW ENTERPRISES.**—The Salem Improvement Company, organized October 1, 1889, J. W. F. Allemong, President; authorized capital \$1,000,000. Of this amount only \$300,000 has been issued, which has all been taken and is already selling at a premium. This company owns about 900 acres of land in and adjoining the town. This property is rolling, thoroughly drained and well adapted for business houses and residences. Wide streets and avenues have been laid out and lots will be placed on sale at noon December 11th. About 100 acres of level land between the railroad and river front (fully a mile) is set apart for manufacturing establishments and sites are offered free.

The Salem Furnace Company, D. B. Strouse, President, has been organized with an authorized capital of \$2,000,000. Of this amount only \$250,000 has been issued. The furnace is let to contract and work already begun. This company owns 2,700 acres of iron-ore land near Salem. The Noyes Brick Works, of Washington, D. C.—capacity 50,000 a day—have already been moved to Salem to aid in meeting the demand of contractors and builders. The Land, Loan and Trust Company, of Salem, was chartered November 13, with an authorized capital of \$500,000; George Allen, Manager and Secretary.



ESTABLISHED 1877.

LAKE SPRING HOTEL AND GROUNDS.

social refinement, cordial hospitality, general intelligence, high moral tone and religious character of its inhabitants. It has always been very popular as a place of residence.

**CHURCHES AND SCHOOLS.**—There are eight churches, two flourishing public and several private schools. A commodious brick building for the graded school is about completed. Salem is the seat of Roanoke College, which has handsome brick buildings on ample and beautiful grounds, a library of 17,000 volumes and students from many States, Indian Territory, Japan and Mexico. The illustrated catalogue of 55 pages and further information will be furnished on application to the president, Dr. Julius D. Dreher.

**ESTABLISHED INDUSTRIES.**—The industries already established are the Camden Iron Works; two Roller Flouring Mills; Sash, Door and Building Establishment; two Carriage and Wagon Factories; a Tannery; several Fruit and Vegetable Canneries; Grain Cradle Factory; a Furniture Factory; two Chair Factories, and three Brick Yards. The Farmers' National Bank of Salem is one of the best managed banks in the country. The *Times-Register* has a large circulation and a well-equipped job printing office. There are also located in Salem the principal offices of the Bonsack Machine Company (capital \$1,000,000), the Comas Machine Company (capital \$100,000) and the South Birmingham Coal & Iron Company (authorized capital \$1,000,000).

Among the numerous improvements projected is a large brick building for the offices of the Improvement and Furnace Companies and for a Banking and Building Company, soon to be organized, with a capital of \$150,000. A site has already been given for a large "Bee-Hive" Power Plant (for small industries) with a capital stock of \$60,000. Many persons are prospecting here for sites for extensive manufacturing enterprises of various kinds. **Manufactories are exempt from taxation for five years.**

Property owners and real estate agents also now offer for sale lots in the town, land adjoining it and farms in the vicinity. Prices are advancing and now is the time to buy.

**MINERALS, TIMBER, WATER-POWER, &c.**—Immense deposits of iron and other ores lie near Salem and throughout this county and section of Virginia. The supply of coal and coke is cheap and inexhaustible. The mountains are well timbered and there are also tracts of timber lands in the valley. The Roanoke River will furnish water-power for many large enterprises. Labor is cheap and all the conditions are favorable for building a large and prosperous manufacturing city.

For circulars and further particulars address

**WM. T. YOUNGER,**

Mayor of Salem, Virginia.

**J. W. F. ALLEMONG,**

President of Salem Improvement Co.



# NEW DECATUR,

## ALABAMA.

The New Industrial City of the Great Tennessee Valley.

### BULLETIN OF PROGRESS.

NOVEMBER 11, 1889.

#### Railroads.

1. Grading contractors are at work changing the line of the Memphis & Charleston Railroad, so as to pass through the Union Depot at New Decatur. At present it passes through old Decatur only, a mile and a-half away. Grounds for a new freight depot and freight yards have been located in New Decatur.
2. The end of the track of the Decatur, Chesapeake & New Orleans Railway, a connection of the Chesapeake & Ohio system, is within twenty-five miles of New Decatur, and the engineers are locating the line to this point. Grounds for shops and freight yards have been donated them. The road will afford another northern and eastern outlet for New Decatur.

#### The River.

The first steamboat to pass through the famous obstruction to navigation on the Tennessee River, known as the Muscle Shoals, a few miles below New Decatur, was the "A. C. Conn." She made the trip through the government canals on the 5th instant. The river will be thrown open to navigation before January. The Land Company at New Decatur are building tracks to their new river dock landing to connect it with the railroads.

#### Freight Rates.

Heretofore New Decatur has been on an unequal footing with other towns in Northern Alabama as regards rates, but this discrimination has been completely remedied by a schedule of rates which goes into effect to-day on all the roads, giving New Decatur the benefit of the lowest rates from all points.

#### Industries.

1. The charcoal iron furnace, which was leased to the New "Decatur Iron, Land & Lumber Company" on October 22d, is being prepared for blowing in, and the necessary trestling and tracks are being built. The same company has leased the adjoining works of the Decatur Charcoal & Chemical Works.
2. The Decatur Car Wheel Manufacturing Company are making the alterations and additions necessary to double their working capacity, increasing it to 200 wheels daily.
3. The Decatur Lumber Company are expending \$40,000 in additional machinery and other improvements to increase their capacity.

#### New Buildings.

1. The new and handsome school building, of brick and stone, to cost \$20,000 is nearly completed.
2. The Westminster Presbyterian Church, one of four new churches being erected, was opened and formally dedicated on the 10th instant.
3. Building improvements, both business and private, are steadily going on. A handsome 5 store block, part of the north wing of the projected Casa Grande Hotel building, is completed, and the entire building (680 feet frontage) will be completed according to the original plans next year.

#### Other Improvements.

The town of New Decatur has placed an issue of \$30,000 of municipal bonds at par for the purpose of street improvements.

#### Projected Enterprises.

Negotiations will be closed this week for extending the system of manufacturers' switch tracks in New Decatur and forming them into a belt line.

#### Opening of the Tennessee River.

On November 12th the steamer "A. C. Conn" passed through the Muscle Shoals, on her way from Green Bay, Wisconsin, to Chattanooga. The river is therefore practically open to navigation, though it will not be formally opened for a few weeks. It was a notable trip. Her owners, formerly of Green Bay, but now of Chattanooga, started her from Green Bay to Lake Winnebago, through the Fox River canal (built by the Government to connect Lake Michigan with Lake Winnebago), thence across the lake and up the upper Fox River to the Portage canal, thence down the Wisconsin, to Prairie du Chien, Wis., on the Mississippi, thence to the Ohio, thence up the Tennessee to the foot of Muscle Shoals, where she had to lay from May, 1888, until November, 1889. The cities of the Tennessee Valley, Knoxville, Chattanooga, New Decatur, Florence and Sheffield, and all intermediate points, are now, after many long years of labor and the expenditure of millions on the part of the Government, in the possession of cheap water transportation to all points of the Ohio and Mississippi and the Gulf of Mexico.

THE DECATUR LAND, IMPROVEMENT AND FURNACE COMPANY have prepared and will shortly publish for free distribution, a beautifully-printed and illustrated pamphlet of about 60 pages, of a convenient size for the pocket, entitled

#### "ON THE BANKS OF THE TENNESSEE."

containing 100 questions briefly but fully answered, about Alabama, Northern Alabama, the Valley of the Tennessee and New Decatur. It has been their endeavor to present in a compact, readable and attractive form all the information that may be sought by capitalists, investors, manufacturers in iron, wood or cotton, farmers, stock raisers or mechanics. It will be accompanied by a colored map of Northern Alabama, showing the counties of the Cereal Belt or Tennessee Valley, the iron ore and coal fields tributary to New Decatur, and its railway and river connections with all parts of the United States.

For Maps, Pamphlets and other Information about New Decatur, address

The Decatur Land, Improvement & Furnace Company, New Decatur, Alabama.

# FORT PAYNE, Alabama.

★ COME TO ★

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No Better Point in the Union  
For Safe and Profitable Investment.

Situated on the MAIN LINE of the QUEEN & CRESCENT ROUTE, fifty-one miles Southwest of Chattanooga, and ninety-one miles North of Birmingham.

Elevation is from 895 to 1,600 ft above the sea, and above fever districts.

DeKalb County is entirely free from debt; taxes light.  
Most liberal encouragement given to industries of every kind.

Iron Furnace and Rolling Mill will be constructed immediately, and other industries of various kinds are under contract.

Correspondence solicited from those who contemplate coming into the South to establish any kind of manufactories.

The different industries will employ at least two thousand skilled workmen, which will secure a population of over ten

thousand, independent of the many industries contemplated.

Iron of the best quality can be manufactured at as low cost per ton as in any other locality in the South.

Coal and iron are being developed rapidly of a superior quality.

Fine timber abundant and wood-working machinery of every kind can be profitably employed at this point.

The Company is prepared to give every reasonable encouragement to manufacturers who will locate at this point.

✍ Correspondence solicited.

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# OXFORD, North Carolina.

✱ THE CAPITAL OF GRANVILLE COUNTY. ✱

SITUATED ON THREE RAILROADS, TO WHICH A FOURTH IS IN PROCESS OF CONSTRUCTION.

## The Cosmopolitan Town of the South

INVITES IMMIGRATION TO HER HOSPITABLE BORDERS.

A family living in Oxford educates boys and girls at home and never flees to the mountains or coast in summer to escape malaria, thus saving thousands to the head of the family. Mark well its points.

### POINTS.

It was founded in 1770 by Jesse Benton, father of Hon. Thomas H. Benton, yet it is the newest town in the State, having twice doubled its population in past 10 years.

### EDUCATIONAL.

It has a large military school and two excellent female colleges, one daily and three weekly papers.

### FINANCIAL.

Its taxable property is about \$2,000,000, its population 4,000. It has opera and market house, two excellent banks with ample capital.

### INDUSTRIAL.

It sells eight million pounds of tobacco a year in five mammoth brick warehouses; has four extensive tobacco factories, forty or more leaf factories, two iron foundries, three carriage factories, sash and blind factory, electric-light plant, four hotels, a broom factory, steam flouring mill, cigar factory. The noted Kimball Tobacco Company, of Rochester, N. Y., after surveying the whole tobacco field, selected Oxford as a spot to locate its North Carolina business, and are about to erect a third mammoth building.

### RELIGIOUS.

Four churches in its midst.

### CHARITABLE.

It boasts of the Oxford Orphan Asylum, two hundred and fifty children well cared for; also lodges of Odd Fellows and Masons.

### CLIMATE.

It furnishes that equable climate that delights denizens of the North. Annually hundreds come to kill quail in its adjacent fields, or seek health from its pure hilly air and mountain water. It has no chills and fever, no malaria, no epidemics.

### ITS BACK COUNTRY AND FUTURE.

Minerals in great richness and abundance fill the soil of Granville. Copper, iron, gold and silver abound. Capitalists from New York and Pennsylvania and elsewhere are working the mines to great advantage. Its farmers make that smooth, bright, waxy tobacco that only the generous soil of Granville vouchsafes to man—tobacco that improves, like old wine, with age, and is shipped with impunity through the humidity incident to an ocean voyage; and that caused Count Bunsen to exclaim that Granville county tobacco was "the finest on earth, free of nicotine." These tobaccos are the highest priced to be found anywhere, bringing often \$1.00 per pound in the leaf. Nestled in the hills of Granville, a very Arcadia, and ideal home among people busy, yet having hearts, awaiting with open arms the coming citizen. Riots are unknown, and there are no race problems to solve.

### ACCEPTIBILITY.

Oxford is only two hours from Raleigh, four hours from Richmond, Va., and five hours from Norfolk, Va.

FOR FURTHER INFORMATION ADDRESS THE SECRETARY OF THE COMMONWEALTH CLUB, OXFORD, N. C.

# SOME SPECIAL CLAIMS

POSSESSED BY

# LIBERTY, VA.

TO THE FAVORABLE CONSIDERATION of all classes of prospectors, whether for homes, for investment of capital, for health, or for business enterprise. With the ensuing scholastic year will be opened the superb building of the Randolph Macon Academy, of which a cut is herewith presented. This institution is built for the thorough culture of boys—mental, moral and physical—is under the efficient management of Prof. W. W. Smith, LL.D., president of the Randolph Macon College at Ashland, Va., and has been constructed regardless of cost, to secure every condition essential to the successful attainment of its objects according to the most approved modern standards. Such another educational institution does not exist in the broad limits of the Southern States. In addition to this two handsome Female Academies, constructed upon the same intelligent, liberal and progressive principles as the Randolph Macon Academy, will be built during the coming year, and, if possible, receive pupils in September, 1890. Besides these, Liberty already possesses

shipping facilities and all the climatic, social, sanitary and pecuniary conditions requisite to the retention of skilled artisans once engaged in their employment. The manufacturers of tobacco, woolen goods, etc., already established here have found the local advantages so great that they have refused every inducement offered them to move to other points.

Every reasonable concession will be made to parties seeking locations for the establishment and operation of manufacturing plants, and upon application to the undersigned specific information will be furnished as to all details, both regarding the natural merits of the location, the character of raw materials within easy access and the terms offered to *bona fide* prospectors for sites.

Few better opportunities have been offered investors in Southern properties than the lands immediately adjacent to Liberty—lands possessing the intrinsic merit of natural fertility and productiveness in addition to close proximity to an embryo city,



RANDOLPH MACON ACADEMY.  
LIBERTY, VA.

the usual quota of public and private schools, for which progressive Southern towns are noted.

These institutions insure an intellectual and moral tone in its society to the residents of Liberty that must give it pre-eminent attractions over mere manufacturing centers to the best class of settlers.

As a special recommendation to investors, Liberty possesses all the advantages of close proximity to the ore beds and coal fields of the famous mineral region of Southwest Virginia, is the county seat of Bedford, itself an unexplored mine of mineral wealth, representing granite, limestone, steatite, kaolin, the hematite and magnetic iron ores, asbestos, mica, graphite, mineral paints, fire-clay, &c.

Manufacturers would find here, within easy access and at low cost, all the raw materials used in their business. Cheap labor in great abundance, cheap fuel, excellent

bleamed with all the elements essential to steady and permanent growth. Some of these lands are already in the hands of improvement companies and have been laid out in beautiful, wide, shady avenues and divided in lots to meet the requirements of those desiring to build or to invest on a modest scale.

Liberty invites the closest scrutiny of its claims and does not require to indulge in extravagance or deception. Its growth is inevitable. With a superb climate, grand and imposing scenery, a surrounding country of great productiveness, invigorating mountain atmosphere, an unlimited supply of the purest free-stone water, unsurpassed healthfulness, good society and the finest schools for both sexes, enterprising and successful manufacturers, close proximity to the markets of the world, cheap labor, cheap lands, excellent shipping facilities, it lacks nothing but more people to make it a model city.

For Information address

{ J. LAWRENCE CAMPBELL, Secty. Liberty Improvement Co.  
R. KENNA CAMPBELL, Manager Longwood Park, Va.



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in first cost, and in operating costs about half as much as the steam presses. Will compress 400 bales to commercial size in **TEN HOURS**, at a fuel expense of **ONE CENT** per bale and a total expense of less than **TEN CENTS** per bale.

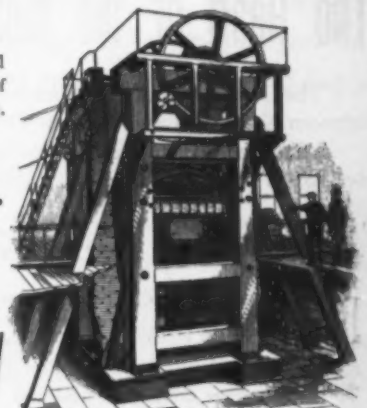
Especially Adapted to Points where from 10,000 to 30,000 bales are received.

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Gen. Agents for Points West of Missouri River.

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# COME TO MARION,

✱ THE IRON AND COAL CENTER. ✱

Future Commercial and Manufacturing Center and Year-Round Health and Pleasure Resort of

## WESTERN NORTH CAROLINA

THE ITALY OF AMERICA.

Population 1,000 People.

Altitude 1,800 Feet.

**SURROUNDED BY VAST FORESTS OF THE FINEST TIMBER IN AMERICA.**

### The Heart of the Inexhaustible Magnetic Iron Ore District of Western North Carolina.

The Iron Ores of this district are the only ores in the South from which steel can be made with profit and advantage. Only point between Knoxville and Atlantic Ocean, and in Western North Carolina, that has cross and competitive railroads.

With the superior quality of Iron Ore and Coking Coal, Marion, N. C., has in its neighborhood, it will be able, when its minerals are developed by railroads now building, to make steel at almost as low a figure as Birmingham now makes iron.

**UNEXCELLED ADVANTAGES FOR MANUFACTURING.**

### The Tide of Emigration No Longer Flows West, but South.

We have more than 500,000 ACRES of Western North Carolina FARMING, TIMBER AND MINERAL LANDS FOR SALE at Remarkably Low Prices, also MARION BUSINESS AND RESIDENCE LOTS, Improved or Unimproved.

#### Our Iron Ores and Coal Fields.

Twenty-three miles north of Marion, N. C., is the Cranberry Iron Mine. The ores of this mine, according to the report of six different assays by the State Geologists of North Carolina in "Geology and Ores of North Carolina," Vol. 2, Chapter 2, vary from sixty to sixty-eight per cent. magnetic metallic iron entirely free from phosphorus, sulphur and titanic acid.

This is one solid mass of ore 400 feet wide, 300 feet high and 1,700 feet long.

Between the Cranberry mine and Marion, and within 8 or 10 miles of Marion is the Linville Mountain, the largest mountain of iron in the known world.

A direct line of railroad is now being built from Marion to the Linville Mine, which also puts Marion in direct communication, and within three hours' haul by freight, of the Virginia coking, cannel and splint coal fields, the finest quality and easiest mined of any coal in the known world.

#### Our Railroads.

The Charleston, Cincinnati & Chicago Railroad is now completed from Charleston, S. C., to Rutherfordton, N. C., a point twenty miles south of Marion. The contract for completing this road to Cincinnati, O., has been let and the grading is now being done. When built this road will cross the Western North Carolina, a division of the Richmond & Danville Railroad, at Marion, N. C., thereby making Marion, N. C., the only city in Western North Carolina and the only point between Knoxville and the Atlantic Ocean, a distance of about 500 miles, that will have competitive railroads.

#### Woods and Timbers.

Among the various kinds of timber in this section are wild cherry and walnut, which according to the report of the State Board of Agriculture, attains the enormous height of from sixty to eighty feet, and a diameter of three feet or more. Among the vast forests of giant trees the other timbers are chestnut, white pine, hemlock, black birch, locust, lime and various kinds of oaks. In comparison with the extent of forest lands around Marion, the clearings are mere patches, there being in McDowell County, ac-

ording to the report of the Board of Agriculture of North Carolina, 122,129 acres of wood land, and 34,778 acres of land cleared for farms.

#### Health, Climate and Water.

Marion, with the climate of Italy, the purest water on the continent and mineral springs of unsurpassed medicinal properties is fast becoming a great health resort of the South. With the invigorating balsam breeze from the singing pines, purified by the mountain and vale, taken in at every breath, consumption or lung trouble cannot exist, and malaria is unknown.

#### Location and Advantages.

We have two good schools, four churches, two newspapers and a low rate of taxation. Come to see us. We will treat you well and give you valuable information free.

Marion is surrounded by an excellent fruit country. We have mountains of the finest Building Stone convenient.

#### Our Water Power.

Running by Marion is the Catawba river with a fall of over 200 feet to the mile, affording unlimited water-power to manufacturers.

#### A Coming Great City.

With the above advantages, which are greater than Birmingham, Ala., had a few years ago, can any person doubt the fact that Marion, N. C., will soon be a great city? The world has now confidence in the resources of the South; a few years ago it did not.

Therefore Marion should grow more rapidly than a city did ten or fifteen years ago. Marion has never had a boom, its first auction sale of lots will take place on the completion of the Charleston, Cincinnati & Chicago Railroad, which will be only a few months.

Address

**OLD NORTH STATE LAND CO., Marion, N. C.**

OR

**W. E. BERRY & CO., Birmingham [Ala.] Agts., 2008½ Second Ave., P. O. Box 422.**



## RANDOM NOTES ABOUT THE "MODEL CITY of the South."

**T**HIS is the title bestowed upon Anniston, Alabama, at its beginning by persons who were impressed by the provisions its founders had made for the comfort and health of its future population, and the farseeing wisdom and judgment that entered into all the plans for its development. And it has amply maintained its right to the title. It has always been as its originators designed it should be—a model in every respect. This idea was incorporated in its foundation, and has been a part of its growth up to the present time.

Anniston is a town of about 12,000 inhabitants, and its population is rapidly increasing. Its numerous industries employ about 6,000 men, and pay out over \$60,000 a week in wages. It is one of the most beautifully located towns in America. Travelers who have visited it say that no more attractive site for a city could be found anywhere in the world. It is clean, sober, moral and healthful. It has churches, schools, water works, electric lights, gas, well-paved streets, handsome stores, fine residences and all the conveniences and attractions of a modern, well-appointed city. It is the industrial and commercial center of one of the richest iron districts in the world. It is surrounded by a splendid agricultural country. It has unsurpassed advantages for the manufacture of everything into which wood and iron enter. It possesses every attraction needed to make it a delightful place for a home or a health resort.

The one remark most frequently made in regard to Anniston is that it is a "solid town," and this is probably its most noteworthy feature. It has had no sudden, fictitious growth, no abnormal development, no unnatural stimulation to be followed by reaction and succeeding depression. Its development has been on a substantial and permanent basis. Manufacturers have been drawn here by the superior quality of Anniston iron, the abundance and cheapness of timber, and other natural advantages, as well as by its attractions as a place for a home. Its facilities and advantages as viewed from the standpoint of business are supplemented by its delightful and invigorating climate, its unsurpassed healthfulness and the beauty of its surroundings.

The following are analyses of the ores used by the Woodstock Iron Co.:

"REED'S BANK" ORE.		"SILVER CREEK" ORE.	
Metallic iron . . . . .	60.02	Metallic iron . . . . .	50.83
Phosphorus . . . . .	.08	Phosphorus . . . . .	.008
"WASHER BANK" ORE.			
Metallic iron . . . . .	55.53		
Phosphorus . . . . .	.06		

There is one peculiarity of Anniston that is very strong in its favor—the fact that the larger part of the manufacturing capital invested here is local capital. The founders of the city didn't simply buy up some thousands of acres of land and then say to the world, "come and take advantage of the unexampled opportunities we offer, buy our stock, buy lots from us, establish manufactures." They first showed their faith in Anniston's advantages by investing here their own money. They built the furnaces, the cotton mill, the car shops, the car-wheel works, the water works, the Anniston & Atlantic Railroad, the Anniston & Cincinnati Railroad, etc. They built the splendid pipe-works plant that has just gone into operation, and the two new furnaces about to go into blast. As fast as they made money they have invested it right here.

Anniston is blessed with a delightful and healthful climate. It is never cold—the most delicate persons can spend the greater part of the time out of doors the year round. In summer the climate is not such as to debilitate and weaken, as is the case in the North and in less elevated localities in the South. The thermometer registers less heat, and even the same temperature is far less apprehensive here than where the percentage of humidity is greater. Its location in the mountains ensures an unfailing breeze, and no matter how warm it may be in the sun through the day, the nights are always cool. The climate seems particularly suited to those who are troubled with throat or lung diseases. A physician living near here, who had suffered for years with a severe bronchial trouble, states that he had lived in Southern California, Colorado, Florida, at Aiken, S. C., and in the South of France, and that the climate of none of these places did him as much good as that of Anniston has done. There are persons here now in vigorous health who believe they would not be living but for their removal to Anniston.

Mr. Albert Howell, of Atlanta, said recently in an interview in the Atlanta Constitution: "Anniston is the coming city. I was there last week. You cannot conceive the bustle and business of that wonderful city. Homes are being built as rapidly as possible, but the city has outgrown itself, and two thousand residences, if they were started at once, would be rented before completion. The other cities may blow and bluster, but Anniston is building, and in ten years will be the best city in Alabama. You mark this prediction."

INFORMATION ABOUT ANNISTON, MAPS, PROSPECTUSES, &c., &c., MAY BE HAD FROM THE

**ANNISTON CITY LAND COMPANY, Anniston, Ala.**

# FACTS ABOUT FLORENCE.

## LOCATION.

Florence is in North Alabama, near the Tennessee line, on the Tennessee river, which is navigable here for large steamers. It is on the Memphis & Charleston Railroad, and the Nashville & Florence branch of the Louisville & Nashville Road.

## AGGREGATE OF ADVANTAGES.

There are many places in the South possessing the advantages of a good climate, healthfulness, natural resources and manufacturing capabilities more happily combined and in a higher degree than can be found in any other part of the country. It is believed, however, that at no point in the South, and hence nowhere in America can there be found an aggregate of so many unsurpassed advantages and attractions as exist at Florence.

## IRON AND COTTON MANUFACTURING.

Florence can make iron as cheaply as any place in Alabama. It has facilities for the manufacture also of cotton goods equal to those of any other place. Anything that uses wood as a raw material can be made here at as low a cost as anywhere in the South.

Thousands of acres of iron ore of a high grade within a few miles of Florence are owned by Florence companies. Limestone is quarried within the town limits. There is enough of it to last for ages.

Cotton mills would get a large part of their supply from the country around Florence. Cypress creek furnishes water power and mill sites enough to make Florence the Lowell of the South.

North of Florence, and up the Tennessee river, there are large areas of timber, embracing a wide variety of hardwoods—forests that the axe has never touched.

## COMMERCIAL AND AGRICULTURAL FACILITIES.

Besides its industrial possibilities, Florence is a point of great commercial importance, and is becoming the center of an extensive mercantile business. It has the advantage of both rail and river transportation and of competing railroads. Several additional railroads are now under construction to open up new trade connections to Florence.

Florence is surrounded by a wide extent of fertile and productive country, as well adapted for farming, stock raising, fruit growing, truck farming, dairying, &c., as any in the world. Further, it has a climate that is delightful the year round. Its health record cannot be surpassed. It has no malaria. In fact, people who live here enjoy a remarkable exemption from ailments of every sort. It has an abundance of the purest water.

## BEAUTY OF LOCATION.

For beauty of location Florence is without a peer. The Tennessee river at this point is as romantic and beautiful as the Hudson. The rolling character of the country, the slopes and hills and alternating valleys furnish a picture to charm an artist's eye. The lovely Cypress creek, a deep and rapid stream emptying into the river just below the town, presents at every turn in its tortuous course a scene of entrancing beauty. The views from some of the higher hills are as fair as the eyes of man ever rested on.

Limited space allows here only the briefest summary of a very few of the more important facts about Florence. For more detailed information write to either one of the following companies. Or better still, come down and see for yourself. Investigation is all that Florence asks or needs.

Lauderdale Manufacturing Co. Florence Cotton and Iron Co.  
 Florence Investment Co. Florence Railroad and Improvement Co. } **Florence, Ala.**

## GROWTH.

Florence is making more rapid progress, proportionately, than any other town in America. This is a strong statement but it is true. And its growth is on a solid and permanent basis.

## SOLID GROWTH.

Florence is not undergoing any wild real estate boom. Its managers are not seeking to advance real estate prices. It is not their plan to get a quick return for the money they have invested, by the rapid sale of lots at unnatural prices. It is their aim to first build up a town, to locate factories and secure a permanent population, when land will have an actual value and sell at prices from which there will not be a subsequent disastrous reaction. At present real estate is much lower in price than in any other town in the South that has made half the progress Florence has made.

## THIRTY NEW ENTERPRISES.

Within the last 12 or 15 months over 30 new industrial enterprises have been located at Florence, with an aggregate cash capital of about \$5,000,000. This remarkable growth is the result of efforts to induce people to simply investigate the attractions of Florence. Investigation and comparison with other places, on the part of any who are looking for a place in the South to locate, will in nearly every case result in the selection of Florence.

## INDUSTRIAL ENTERPRISES IN OPERATION.

The following are some of the industries in Florence. Some of these are in operation; others are nearly ready for work and others have but recently commenced work on their buildings: One of the largest and best furnaces in the United States now in blast, and another under construction; a stove factory; a hardware company, with a capital of \$300,000, manufacturing fine building hardware, &c., the only factory of the kind in the South; a wagon factory, with capital of \$150,000; agricultural implement works; handle factory; woodenware factory; sash, door and blind factories; a cedar bucket factory; a pump factory; planing mills; a factory to make wooden butter plates such as grocers use; a flour mill; a cotton mill in operation, and a \$500,000 mill building and others projected; a jeans factory; a gingham factory; a woolen mill; a cotton gin; a marble company; a roofing and paint company; a shoe factory; a suspender factory; a compress, packet and ferry company; building and loan companies; a canning factory; brick factories; a dummy railroad company, and a number of other enterprises.

## \$15,000,000 INVESTED.

The aggregate capital of the industrial, mercantile and development enterprises in Florence exceeds \$15,000,000.

A year ago the population of Florence was 2,000. It is now about 10,000.

There are more than 1,000 carpenters at work in Florence but they can't build houses fast enough to keep up with the increase in population.

## INVESTIGATION AND INVESTMENT.

*A number of the foremost capitalists and iron and cotton manufacturers, and others, of Philadelphia, Boston and other Eastern cities, after a thorough personal investigation, have just made heavy investments aggregating several million dollars in Florence.*



# Manufacturers' Record.

PUBLISHED EVERY SATURDAY BY THE  
MANUFACTURERS' RECORD CO.

R. H. EDMONDS, EDITOR.  
WM. H. EDMONDS, BUSINESS MANAGER.

OFFICE,  
COR. EXCHANGE PLACE AND COMMERCE STREET,  
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THOMAS P. GRASTY, Southern Staff Correspondent,  
Headquarters at FLORENCE, ALA.

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BALTIMORE, DECEMBER 21, 1889.

WE present this issue of the MANUFACTURERS' RECORD, with its facts and figures about the South, and the distribution of it to all banks and financial institutions in the United States as our Christmas gift to the South. May it prove a blessing and draw to this favored land many thousands of home-seekers, who shall find health, happiness and prosperity here, and many millions of dollars for investment, which shall yield a rich harvest of profit. May it be the medium of communication to bring the South with its resources awaiting development, and the North with its surplus capital into closer relation, and thus be a mutual blessing to all.

ALABAMA has heretofore been so busy developing its coal and iron interests that it has failed to give proper attention to the manufacture of cotton goods. In this line Georgia and the Carolinas have been a long distance in the lead. Now, however, Alabama is turning its attention to the building of cotton mills, and it proposes to lead the whole South in having the largest mill in this section, and Florence is the fortunate town which is to build this mill. Heretofore the Eagle & Phoenix Co.'s four mills at Columbus, Ga., and the Clifton's two mills at Clifton, S. C., have been the largest cotton mills in the South. The former has 46,000 spindles in its four mills, and the latter 49,000 in two mills. Florence has commenced to build a mill, and given contracts for its machinery, to have 53,500 spindles. At present there are 21 cotton mills with an aggregate of 131,900 spindles in Alabama, an average of a little over 6,000 spindles to a mill, so that this new mill will equal in size nearly nine of the present average of Alabama mills. This is a day when large cotton mills have very decided advantages, and the projectors of this mill have done a wise thing in planning for such a great enterprise. May many others follow.

ARE you a Northern or Western banker? If so, you cannot afford to be unacquainted with the unprecedented growth of the South, as weekly set forth in the MANUFACTURERS' RECORD.

## The Healthfulness of the South

The people of the United States are vivacious, energetic, hearty and healthy. There is no section, not even in the acknowledged malarial districts, of which this cannot be truly said of the majority of inhabitants. This is the more remarkable because between the Canadian line and the Gulf of Mexico, and between our ocean frontiers, there are varieties of climate and diversities of physical conditions that affect human life for good or ill.

As a nation we have paid little attention to sanitation, and we have no such elaborate systems of registering vital statistics as are employed in Europe. The foreigner seeking information about the comparative healthfulness of our sections can find no other data to guide his judgment than the decennial census reports and the statistics compiled by the principal life insurance companies for their agents. Incomplete as these are, they suffice to prove the salubrity of every State and Territory of the Union. Notwithstanding this, there are many Americans who honestly believe that life in the Southern States is scarcely endurable in the summer months; that malarial and other fevers prevail; that the inhabitants barely manage to survive by the continuous use of calomel and quinine. Erroneous as these ideas are, they are held by so many who are otherwise well informed that it seems worth while to correct them by stating a few of the many facts that might be presented to prove the utter absurdity of such notions.

The tenth census contains many tables of vital statistics that afford excellent opportunities for comparisons. Among them is a series showing the average death rate for 100 births of children less than a year old. From these we have selected six Southern and six other States, that fairly represent the diverse climatic conditions of the sections:

States.	Per cent.	States.	Per cent.
Alabama.....	9.41	California.....	10.68
Florida.....	6.61	Massachusetts.....	17.05
Louisiana.....	9.68	Michigan.....	9.47
North Carolina.....	10.03	Pennsylvania.....	10.90
West Virginia.....	7.81	Minnesota.....	8.56
Texas.....	10.04	Illinois.....	11.42

The average rate given for the entire country is 11.10 per cent. It will be noticed that not one of the Southern States runs up to the average, and yet Florida, Louisiana and North Carolina have large areas of swamps and tide marshes that are popularly supposed to be perpetual breeding places of malarial fevers.

In the same States the numbers of citizens of all ages in excess of sixty years per 100,000 of population were as follows:

States.	Number.	States.	Number.
Alabama.....	4,428	California.....	4,092
Florida.....	3,970	Massachusetts.....	8,383
Louisiana.....	4,670	Michigan.....	5,760
North Carolina.....	5,327	Pennsylvania.....	6,383
West Virginia.....	5,001	Minnesota.....	4,333
Texas.....	3,231	Illinois.....	4,784

In comparing the foregoing tables several things must be taken into account, that their full force may be appreciated.

1st. With the exception of West Virginia this group of Southern

States has a large negro population. Had the percentage of infantile mortality been confined to the white race it would have been much less, for the proportion of deaths to births among the colored people of those States is largely in excess of that among the whites.

2d. In the longevity comparison many allowances must be made to reach the truth. It was said that the Confederacy to fill its ranks "robbed the cradle and the grave." It certainly called into military service many men beyond the usual age, and the number of that class who perished in the army was considerably increased in all the Southern States after the war ended by the deaths of many men past middle life, who, after the strain of the protracted struggle was removed, were unable to rally when disease attacked them.

3d. While all the States of the Northern group had been receiving additions to their population from foreign countries for many years, only Texas and Florida had gained immigration. How much this means is shown by the fact that the number of citizens of Massachusetts of foreign birth who, in 1880, were between 60 and 90 years of age, was 38,849, while Texas had among its million and a half of people only 8,342 inhabitants of foreign birth of 60 years of age and upwards, and the remainder had but very few.

But it is not necessary to rely solely upon the columns of census figures to prove the healthfulness of the South.

The records of the medical service of both parties to our civil war are filled with convincing testimony to that effect, and the experience of the thousands of Northern men who have since then become citizens of that section is corroborative of those records. In the annual report of the South Carolina Board of Health of 1883, this passage occurs: "It was confidently predicted at the commencement of the late war that no picket line along the coast between the armies would be maintained during the summer and autumn months. To the surprise of every one, however, such did not prove to be the case. Climatic influences interfered in no way with the vigorous prosecution of hostilities. \* \* Since the war numerous white families who formerly removed to the North or to the up-country during the summer, have remained upon their farms the year round in the enjoyment of their usual health."

Here is official evidence of the highest character that the war did away with an illusion that had caused worry and discomfort to people for generations. Similar experiences have occurred all along the Southern seaboard, and while no one contends that there are not malarial localities here and there where the prophylactic use of quinine is requisite, yet, as

compared with the South's grand area, they are of small extent and few in number.

A careful study of the proceedings of medical conventions held in the various States, and of the papers read and discussed by the fraternity, show clearly that most Southern physicians have plenty of time to attend to matters outside of their immediate vocation; or, to put it in the words of an eminent and somewhat humorous practitioner, "this country is miserably healthy."

## Cost of Cotton Mills North and South.

We published some time since comparative statistics regarding the building of cotton mills, showing how much cheaper these mills can be built in the South than in the North. The Boston Advertiser took exception to our figures and said they were not true, but carefully refrained from showing why they were not true. When we gave as authority for our figures C. R. Makepeace, one of the leading cotton mill builders of New England, the Advertiser subsided without a word.

Now comes the report from a Mr. Foster, for thirty years or so a leading cotton manufacturer of New England, who was employed as an expert to pass upon the proposed establishment of a cotton mill at Denison, Texas. Mr. Foster has recently inspected the new Amoskeag mill at Manchester, N. H., and the new mills building at New Bedford, Mass., and at Fall River, Mass., and has adopted many modern improvements contained by many of them. He has estimated the cost of brick laid in Denison at \$10 per 1,000, so as to be on the safe side, and the timber for girders, etc., which cost the builders of the new mills at New Bedford and Fall River \$28 to \$35 per 1,000 feet, delivered in Denison to cost from the forests of Texas from \$14 to \$16. The lime will come from the vicinity; also the bricks, and the lumber will come from the eastern part of the State.

The editor of the Advertiser was on the recent excursion to Denison and presumably present when Mr. Foster made his report and the necessary \$500,000 subscribed to build the mill. We are watching with interest the editorial columns of the "old respectable daily" to see whether it will retract its harsh words about the resources of the South, or continue its old, long-used and much dilapidated argument of "taint so." We can soon decide whether it is prejudice or justice that controls it.

A PROPOSITION is before the South Carolina legislature to dispose of the State's interest in phosphate beds. It is expected that more than money enough can thus be secured to pay off the State debt. If this sale takes place, it will be an important event and cause lively times among phosphate manufacturers and capitalists.

### Ignorance from Prejudice.

A leading weekly periodical, published in New York, has been telling stories and incidents to illustrate the ignorance of Europeans regarding this country, and the ignorance of Americans regarding Europe and its people. Unquestionably no people, as a people, read and travel as much as we Americans, and are as broad-minded as we. But every great man has his hobbies and narrow-minded ways, and as it is with the one so it is with the whole. As a people we are remarkably free from prejudice, yet from the foundation of the government there has been an increasing prejudice of one section against the other, while in other matters we have thrown aside prejudices.

During the first seventy-five years of our national history the North and the South were apparently striving at all times to find as many points as possible upon which they could disagree, and naturally bitter prejudices were engendered. Of late these social hostilities have ceased to a considerable extent, and there is more of a seeking of common grounds upon which to meet in harmony. But there is a deal of missionary work to be done yet. The people of the South, as a whole, have not had the benefits of travel and popular education to the same extent that the people of the North have had, and theoretically are not supposed by some to be as free from prejudices, yet from an extended acquaintance of people North and South the writer is convinced that the Southern people do not have such bitter prejudices and feelings against the people of the North, as the Northern people have against the people of the South. This certainly is a most remarkable condition of affairs, when it is considered what a terrible ordeal the South went through between 1860 and 1880—overrun by armies, defeated, then turned over to the tender mercies of impudent rascals for plunder and insult. Such mobility of character and a complete rearrangement of a vast social organization is without a parallel in the history of the world.

Southerners give the North credit for being energetic, thrifty and fertile in means and methods. They admire its fine institutions, its busy and beautiful cities, and are proud to live under the stars and stripes with it. Why cannot Northern people—the greatest travellers and who claim to be the best all-round educated people in the world—reciprocate and acknowledge some of the good things in the South? They enjoy selling our cotton for a percentage and paying for it in foodstuffs, clothing, etc., at a profit. But why do they not acknowledge our other great resources, such as iron, coal, lumber and rich lands? Northern iron manufacturers, as a whole, will not acknowledge the high quality of Southern iron. They look at specimens and listen to the reports of experts,

and still say "we don't believe it." They cannot imagine anything better than Pennsylvania iron unless it is imported, and decline to spend fifty dollars to go South to see for themselves. But they willingly spend hundreds and perhaps thousands of dollars to go to Cuba or Lake Superior, or somewhere else, to examine ores.

Northern manufacturers will not believe their eyes and give Southern coal credit of being good coking coal. They will not look at our timber lands, but go over into Canada to develop her resources, rather than those of the South. Neither will they buy our farming lands, in many cases the richest of bottom lands, which can be had for a few dollars an acre, but rather go to Colorado, California, or elsewhere, and spend millions of dollars on vast irrigation schemes.

There are many Northern men exceptions to this, but we refer to the Northern people as a whole. They can only think of the South in connection with the race question, and their newspapers and politicians embrace every opportunity to increase this sectional prejudice. It is most deplorable that one section of the greatest, noblest and richest nation in the world should so belittle and hamper the growth of another section from such motives, especially when this other section meets it more than half way, and has inate in it every possible reason for demanding the closest of ties, business, social, political and moral. Let the North learn from the South and do away with its prejudices.

### Give Okra Fibre a Test.

One of the leading fibre experts of New England recently examined some okra fibre sent him by the MANUFACTURERS' RECORD, and said "this seems to be a very nice article, and I think it would work well for rope twine; can I get a ton or so of it to give it a fair test?" We have hunted the South over in vain for a ton of fibre from one of the most commonly raised plants. Next year the prospects are that we shall be able to find a great many tons. Mr. Charles Johnson, of Algiers, La., Mr. Felix Fremerey, of Yorktown, Tex., and others propose to go into fibre raising more extensively next year than ever before. Mr. Johnson informs us that he hopes to have several hundred acres. With the conveniences now at hand for decorticating and degumming fibrous plants, we hope to hear of a great many others who will give this indigenous plant a thorough test as to its fibre-producing qualities. Here will be a good work for the Alliance to undertake, and thus furnish a practical solution of the bagging question.

READ the "Views of Leading American Bankers" on page 16 of this issue. You will find matter of much interest in what they say.

### Are You Looking for Safe and Profitable Investments?

If you are, examine this issue of the MANUFACTURERS' RECORD carefully. You will find many interesting facts about the most progressive towns in the South,—towns that are fast growing into cities, where investments can be made in real estate, in building houses, or in manufactures, with an assurance not only of liberal returns but of entire safety. You will also find advertisements of mineral and timber lands for sale that will inevitably double in value in the next few years, and the cards of banks, brokers and real estate agents, who will give you any desired information about the opportunities for investment in their section. Look over all these things and investigate for yourself. It will only cost you a few stamps to make enquiries.

Great fortunes are going to be made in the South during the next five or ten years. Men who make judicious investments now will find their wealth increasing every year more rapidly than they could hope for in any other section, and the wise man will improve the opportunity while he has it. Villages are growing into towns, and towns into cities, based on the most solid foundation that could be asked—the utilization of practically unlimited stores of coal, iron, timber, cotton and other raw materials, and hence safer investments can nowhere be found than in the South. If you investigate you will invest.

### Three Americas Exposition.

The National Board of Promotion, in charge of the Three Americas Exposition movement, have agreed upon the following bill, which has been introduced in the Senate by Senator Gorman, of Maryland:

A bill to provide for a Three Americas and World's Exposition at the National Capital in 1892.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that a Three Americas and World's Exposition be held at the National Capital in 1892, in commemoration of the 400th anniversary of the discovery of America by Christopher Columbus, and that the President of the United States appoint a Governmental Board of nine directors to formulate and superintend the execution of a plan for such Exposition.

Sec. 2. That said plan shall include:

A Three Americas Museum, to remain as a memorial building in commemoration of that great historical event, and as a repository of the antiquities and history of the Western Hemisphere.

A Three Americas Building for an exhibit of the representative resources, arts, and industries of the eighteen American sister Republics, the Dominion of Canada, and the West India Islands.

A State and Territorial Building for an exhibit of the representative resources, arts, and industries of the forty-six States and Territories of the United States.

A building for an exhibit of working models of great American inventions.

A building for a temporary exhibit of the representative resources, arts, and industries of all nations other than American.

A statue of Christopher Columbus, to be

unveiled with appropriate ceremonies on the 12th of October, 1892.

Sec. 3. That the President of the United States, through the Department of State, shall make proclamation setting forth the dates at which the Exposition shall open and close, and inviting the participation of all nations of the world, and all States and Territories of the United States.

Sec. 4. That the President of the United States specially invite the Presidents of the eighteen American sister Republics, the King of Italy, the Queen of Spain, and the Presidents and reigning sovereigns of all other nations, to visit the United States in 1892, and join with him in the ceremonies attending the unveiling of said statue of Christopher Columbus.

Sec. 5. That the issuance of \$15,000,000 of the bonds of the District of Columbia is hereby authorized, or so much thereof as may be found necessary for the purpose, to bear such rate of interest and to mature at such time as to Congress shall seem best, to be sold at not less than par, the proceeds to be paid into the Treasury of the United States as a fund for the expenses of holding said Exposition at the National Capital; any unexpended balance thereof, together with the receipts over and above the expenses of said Exposition, to be placed to the credit of the District of Columbia for the liquidation of any indebtedness of said District.

WHEN a business man in the South wants any kind of machinery he naturally turns to the advertising columns of the MANUFACTURERS' RECORD to find where to buy it. Most of the leading machinery manufacturers of the country appreciate this fact and act accordingly, but some few do not, and hence mis-trade that they could secure. Last week Mr. S. B. Lowe, of Chattanooga, wrote:

Please send me the names of manufacturers of watchman's clocks. I can't find a single one advertised, and we can sell a dozen in one day in this town.

A few days ago an Alabama rolling mill wanted certain machinery in their line, but could not find it advertised in the MANUFACTURERS' RECORD, and had to adopt other measures to hunt it up. Cases similar to these are often called to our attention. Northern manufacturers should remember that the advertising pages of the MANUFACTURERS' RECORD are "The Buyer's Guide" for Southern users of machinery.

THE example set us by those Texans who want to take Col. Henry Exall, the eminent Dallas banker and developer of resources, away from his business in order to make him Governor of Texas, is being followed by a great many people in Alabama, who desire to make a Governor out of Col. Jos. F. Johnston, the President of the Alabama National Bank, at Birmingham. As the MANUFACTURERS' RECORD took occasion to remark, in the case of Col. Exall, no Southern State, and least of all Alabama, in this day of development, at this veritable flood-tide of opportunity, can afford to spare to politics such active factors in the promotion of material prosperity as the gentlemen named. The tendency, however, to put business men into high State offices, betokens a very healthy condition of public sentiment, which will have a good effect.



## "THE LAND OF THE SKY."

### The Manufacturers' Record's Exploring Party in North Carolina.

MANY MINERALS OF MANY KINDS.

#### A STATE OF GREAT POSSIBILITIES.

HEADQUARTERS  
MANUFACTURERS' RECORD'S  
EXPLORING EXPEDITION,  
IN THE MOUNTAINS,  
Dec. 24, 1889.

Beautiful snow lies on the north exposures of the eternal hills, and mud on the south exposures. This gives a variety to scene and climate that, in some respects is pleasant, and in some other respects is quite the reverse. Early in the morning when the ground is hard, and the early riser feels similarly, it is not difficult to get over a good deal of rugged mountain side with a reasonable degree of comfort; but, by and by, the ground begins to soften and by ten o'clock there is a toboggan like diathesis to steep inclines that does not render declivitous travels altogether pleasant, or safe. Even mules, patient and sure footed, and withal gentle except behind the stern post, slip sometimes, and it requires all the nerve the matutinal cup of coffee has given the party to keep us in that calm and observant frame of mind that the necessities of the occasion call for. But the air is invigorating beyond compare, when it doesn't rain, and it is fine to swim swollen creeks, when they are not too deep; so, altogether the lot of the field party in the Southern mountains at this season of the year is not as bad as it might be. There are soft, warm blankets at night, and a pipe and something hot. For these creature comforts the day's labor is worth the appetite it produces.

Treading on the verge of the great Carolina country, and preparing for its thorough reconnaissance one is necessarily impressed with the magnitude of the task. Not to get away from the technical work we have in hand, it is interesting to remember that the "Old North State" was the real, original cradle of American liberty. It was in the county of Mecklenburg, in the mineral belt, that the first Declaration of Independence was promulgated, some time before the larger but not stronger Declaration was issued from Philadelphia. It is pleasant, therefore, to reflect that the first of communities to throw off the yoke of foreign power is now likely to become the first, or among the first, exemplars of the new American regime in the South. Other States may be able to show larger cities, more millionaires and many other things, but North Carolina can safely challenge the array in respect of general and evenly diffused prosperity, good wholesome American citizenship, and natural resources in process of quiet, persistent and golden development.

First among peoples to move for freedom North Carolina appears also to have been the cradle of Southern American boomers. Away back in 1852, Dr. Emmons, previously geologist of the State of New York, made a preliminary report upon the mineral resources of North Carolina. Familiar as he was with the wealth of the Eastern and Middle States, still he could not fail to be impressed with the vast resources and industrial possibilities of this region. In the course of his report Dr. Emmons makes use of language supporting his theory of future Carolina greatness, that reminds me of the prophecies I used to make, years ago, regarding the possibility of Alabama competition with the pig iron production of Pennsylvania, and which used to bring any amount of abuse upon my bright bald head. Remember this was (I mean Emmons was)

away back in the earliest of the fifties, and note what he says:

It has been supposed that Pennsylvania must enjoy a monopoly in the manufacture of this indispensable metal (iron), in consequence of the extent of her possessions, and the vast amount of anthracite which she can employ. Of the extent of her resources in this respect no one can doubt. She can make iron cheaply by her anthracite, but no cheaper than it can be made on Deep River by bituminous coal or coke; and coke made iron will be as good as that made by charcoal, in consequence of the purity of the bituminous coal on Deep River. And in the manufacture of coke, I believe, products of distillation may be obtained which will more than pay the cost of making the coke. \* \* \* What I wish to say is, that in the coal of Deep River, the manufacturer has all the material he can want for this purpose; and if a better article of iron can be made from coke than anthracite, then, in a district of equal extent, North Carolina has advantages over Pennsylvania, for the manufacture of iron. In proof of this I repeat that she has: 1st. The peculiar ore of the coal fields; 2d. The magnetic, specular and hematitic ores of the primary and paleozoic rocks in immediate proximity; 3d. The use of coke by which to make iron; 4th. A fine agricultural region for the cereals, and 5th. A milder climate and rivers both for moving machinery and transportation, which are unobstructed in winter. The cost of living and the means for conducting the business, will be much cheaper. These advantages are too obvious to require comment or further explanation.

It hardly seems possible that any of our friends in Tuscaloosa, Alabama, with a government appropriation for the improvement of the Warrior River in view could get much ahead of Dr. Emmons in his prognosis of thirty-seven years ago. Well, time has justified the old boy in his beliefs and the tide of capital and development is pouring into Carolina at last. Dropping, for a moment, into a Gath like divergence, my old acquaintance Dr. Dabney, formerly State Geologist of North Carolina but now the honored, and successful, President of the University of Tennessee at Knoxville, remarked to me the other day that, early as were the labors of Dr. Emmons, his work stands to-day as one of the best descriptions of any Southern geological or mineral area. All later reports, those of Admiral Wilkes, Kerr and others constantly refer, and with confidence, to the conclusions reached by Emmons.

Yet there do not appear to be as many valuable minerals in North Carolina as there might be. At present the list only reaches 160; sometime there may be 161. A distinguished pilgrim from New England, where they have everything that the lavish hand of nature could shower upon them, except a diversity of natural resources and good climate, has turned himself loose in print in honor of the region. He observes that the minerals of this mountain country are iron in all forms of the ore; copper, alone or in combination with other metals; gold in dust, coarse grains, and nuggets, in quartz, and in nearly all other forms; silver, which has been found with copper and galena; manganese; lead; nickel; chrome ores; precious stones; asbestos; corundum (of which hundred of tons are sent annually to Woburn, Massachusetts); marble in every variety from pure white to that beautiful translucent pink which has been called "North Carolina Onyx"; mica, which was known to the mound builders centuries before the white race effected a lodgment in North America; soapstone, from white to bluish grey; talc; potter's clay, of every known quality; flexible sandstone, said to be the matrix of the diamond; ochres of many tints, and mineral paints; as also staurolites and many other of the curiosities of mineralogy which have no practical value. Two vast bodies of iron ores of remarkable purity have been traced for many miles, and one of them in the northwestern corner of the State, near the Tennessee border, has been developed on an extensive scale. This deposit is the famous Cranberry, about which readers of the MANUFACTURERS' RECORD are likely to hear a good deal in the days which are to follow. Probably North Carolina leads the nation in the production of pre-

cious stones. That beautiful Emerald-like gem, called Hiddenite, after Professor Hidden, its discoverer, has a deeper, brighter color and greater brilliancy than its Oriental prototype, the true Emerald. It is more like a glowing green diamond than an emerald. The corundum deposits of the State have been scarcely exploited except in a small way in some few localities; still it is known that they have produced several fine ruby and sapphire crystals, and that there is doubtless a great deal in store for the prospector in this line. The gem gravels are known to have given up a number of fine diamonds, one of which of historic interest, was reported to be as large as a walnut. However, it is upon the basis of the useful rather than the precious minerals and metals that the old North State is at present banking. True there are gold and silver to attract the adventurous and perhaps to make him a bonanza prince in no time. But the people who would "wear diamonds in the spring" will be much more liable to realize that honorable ambition by delving after iron and coal, and hewing the lordly timber of this section.

The work so ably begun by Dr. Emmons was continued by Professor Kerr, whose report upon the iron ores of the State (1875) is a mine of valuable information, and indispensable to any investigator. With a degree of consideration for the laity not invariably shown by all geologists, Professor Kerr begins his monograph with a little popular description of North Carolina ores which will bear reproduction. After remarking that "the ores of iron are very widely distributed in this State, their occurrence being not only co-extensive with the area of the Archæan (Azoic) rocks, but extending over a part of the mesozoic, and even into the Quarternary"; he proceeds to name the varieties occurring which are Magnetic, Hematite, Limonite and Siderite, and most of their modifications. "For the benefit of those who are not familiar with the mineralogy of the subject, and who may not have access to the authorities, it may be worth while to state that Magnetite (magnetic iron ore, grey ore, black ore), a granular, hard, dark to black heavy mineral, contains when pure 72.4 per cent. of iron; Hematite (specular iron, red hematite, red iron ore), 70 per cent.; Limonite (brown iron ore, brown ochre, bog iron ore, etc.), very nearly 60 per cent.; Siderite (Spathic ore, carbonate of iron), 48.28 per cent. These ores are never found in a state of purity in workable beds, but contain various impurities, earthy or rocky, in different proportions—alumina, silica, lime, magnesia, manganese, etc.; so that practically that is considered a good ore which yields 40 to 50 per cent. of iron in the furnace."

It is perhaps superfluous to observe that the widespread occurrence of the various iron ores throughout the Western and mid-land counties of North Carolina, opens up a field for research and consideration not to be lightly gone over. It is an iron field relatively as vast and important as the coal field is to Kentucky. North Carolina has a fine coal field, too, which must have attention later; but just at present the thing in hand is to clear away the underbrush for our campaign against the great iron region, and to commence that intelligently it will be necessary in a condensed way to note what is known of the Carolina ores, and that will require at least the space of another paper.

GOLDSMITH BERNARD WEST.

THE MANUFACTURERS' RECORD gives a list every week of every new bank or loan association organized in the South, and all municipal bonds offered for sale.

SOUTHWARD the course of Empire takes its way.

## A BRIGHT FUTURE.

### Greensboro to Lead in the Development of the Rich Bessemer Ores of North Carolina.

#### A PROSPEROUS AND PROGRESSIVE TOWN.

A Company Backed by Leading Railroads and Capitalists to Build Bessemer Furnaces, Rail Mill, &c.

[Spec. Correspondence MANUFACTURERS' RECORD.] GREENSBORO, N. C., Dec. 13, 1889.

The simple announcement in the MANUFACTURERS' RECORD of the 7th inst. that such men as Messrs. Geo. S. Scott, president of the Richmond & Danville Railroad; Julius A. Gray, president of the Cape Fear & Yadkin Valley; A. B. Andrews, president of the Western North Carolina Railroad; Jas. B. Pace, the several times millionaire, president Planters National Bank, Richmond, Va.; Wm. E. Anderson, president Citizens' National Bank, Raleigh, N. C., and a dozen or more others of equal financial and business prominence had organized "The North Carolina Steel and Iron Co." with a capital stock of \$1,000,000 to build a Bessemer iron furnace to be followed by a steel rail mill, &c., gave a stimulus to business and investment in real estate that shows that local capital is alive to the demands of the occasion. Not less than \$100,000 worth of real estate has changed hands here since the announcement was made, and \$20,000 worth changed hands to-day.

Few manufacturing enterprises were ever organized under such favorable conditions as this Iron & Steel Co. Backed by such great systems as the Richmond & Danville and the Cape Fear & Yadkin Valley Road, owning inexhaustible mines of high grade Bessemer ores that can be delivered to the furnace at not over \$1 a ton, in close connection with the Pocomah coke district and owning 2,000 acres of land in and around Greensboro secured at low prices, it has the basis for a most remarkably successful future. It will not have to start a new town; a prosperous, progressive, wide-awake town of 7,000 people is already here. Greensboro is one of the most attractive towns in the whole South. It is clean and wholesome in appearance; its streets are well kept and carefully attended to; its business blocks are substantial and business-like; its homes are well regulated and tastefully attended to—homes that would do credit to the most thrifty town in the country; its business men are business men. They are at their offices during business hours, brimful of energy and push. They are alive to business opportunities that will benefit them or their town. One man tersely stated the whole aim of Greensboro and its people when he said to me, "We propose to have Greensboro the best town in North Carolina to live in and the best town to do business in." They can do it, too, for they have here a most delightful climate, fine transportation facilities, a command of the leading raw materials, such as hard and soft woods, coal, fine quality of iron and other minerals, and most important of all, a strong determination to accomplish their ends.

Growth and development here have been principally during the past five years. The town now has over 7,000 population, a wide-awake active chamber of commerce, a well-organized and well-backed land and improvement company, four banks, two spoke and handle works, three foundries, a flour and hominy mill, two manufacturing of plows and water wheels, two sash, door and blind factories, two saw and planing mills, one shop for builders' supplies and materials, three brick-yards, five tanneries, a drain pipe and fire-brick works, and a factory,

four tobacco factories, three tobacco warehouses, six tobacco prize houses, besides newspapers, gas works, electric light works, city water works, and four well-established and well-supported banks. In addition to this large and varied list of industries, a fine cotton yarn factory, 60 by 275 feet, one story high, is now building. It will have a capacity of five thousand spindles, and fifty thousand dollars has been subscribed towards a second cotton factory, which will undoubtedly be built very shortly.

Greensboro prides itself upon many of its institutions, but the one institution which marks it, in my mind, for continued growth and prosperity, is its public school system. As I met leading citizens, I was not asked: "Have you seen our fine court house," or "Have you seen our handsome jail," but "Have you seen our new school house." In addition to the public schools, there is a famous female seminary, and a seminary for the education of colored teachers.

I have mentioned the proximity of this town to abundant supplies of raw materials. The railroads connect it with the famous great forest area at the southeast, only a few miles distant, while in every direction, a few miles from the town, are forests of the choicest and most valuable hard-woods of commerce.

Thirty miles south are the Deep river coal fields, while north and northwest are other great coal fields, and in a few months the town will have direct railroad communication with Southwestern Virginia and the Pocahontas coal fields.

Within this and adjoining counties are seventy-five gold mines.

It is in such a town as this, and with such a basis as mentioned of iron ore property, 2,000 acres of land adjoining the town, and proximity to coke, &c., and backed by such men as I have mentioned, that this steel and iron manufacturing company starts out on its career of prosperity.

The officers and directors of the company have determined to make the manufacture of iron and steel in Greensboro a success. Already several large Northern manufacturers want to locate here. To-day ground was bought on which to locate car works. A \$100,000 company is being organized to establish a wagon and carriage factory, and other enterprises are under consideration.

When it becomes known that Bessemer pig iron can be made here for \$8 per ton; that steel rails can be made for less than it costs Northern manufacturers to buy their pig, and that it is going to be done by men who know what they are about—and the best experts endorse these statements, it looks like it is about time for Northern manufacturers and capital to move South. The North Carolina Steel & Iron Co. have limited their capital to \$1,000,000, and have opened books of subscription at Davis & Wiley's bank, Salisbury, N. C., and at the National Bank of Greensboro, here. The stock has already been largely taken, so the company's financial success is assured.

So soon as surveys can be made, the 2,000 acres of land that the company has in and around Greensboro will be laid off into streets, factory sites, lots, parks, drives, &c., maps made, and the lots offered for sale. The managers of the company say they will offer extra inducements to manufacturers to locate here.

Of Middle North Carolina, in which Greensboro is situated, it has justly been said that "its salubrity, the variety and value of its productions, its mineral wealth, its manufacturing facilities, mark it out as one of the most desirable abodes for man, and a future center of great wealth and population."

Greensboro is the capital of Guilford county. It is at the junction of the Richmond & Danville, the North Carolina, the Cape Fear & Yadkin Valley, and the Northwestern N. C. Railroads. It is most favor-

ably situated. The climate is genial and healthful. The elevation is 900 feet above the sea level.

Railroads extend in six different directions from Greensboro. Raleigh is 83 miles east; Richmond 189 miles by the R. & D. R. R. Washington, D. C., 319 miles via Lynchburg on the Virginia Midland; Charlotte, Columbia and Charleston, on the South; Atlanta southwest, and Asheville 197 miles west via Western North Carolina Railroad. New York is reached in 15 hours. Several new railroads are projected, and numerous feeders are being constructed, connecting important points with the lines now centering at Greensboro. The Cape Fear & Yadkin Valley Railroad is being extended from Fayetteville to Wilmington, and when complete in its northwestern extension, will connect with Cincinnati, O. This road will furnish direct connection with the Pocahontas coal fields and with the Norfolk & Western Railroad system.

Guilford county embraces about 400,000 acres of fertile land, 30 per cent. of which is tilled, all well watered and well timbered. The counties adjacent are equally good; and as the future of this territory is closely connected with the growth and importance of Greensboro, the natural wealth of these counties is a pertinent inquiry. Immediately north of Greensboro, and again to the east, is the yellow tobacco belt, which grows the finest quality of tobacco in the world. Not far south, and within easy reach for commercial use, are the cotton fields which extend on to South Carolina. To the southeast are the pine forests which furnish turpentine and resin, and superior lumber for building and manufacturing purposes. Guilford county is best adapted to the cereals and to fruits. Wheat, oats, corn, the grasses and vegetables are satisfactorily grown. The choicest fruit and luscious grapes are in abundance. Several extensive nurseries, which flourish in this county, ship immense quantities of trees all over the United States. The climate of Guilford county is excellently adapted to all kinds of fruits, such as apples, pears, peaches, apricots, nectarines and cherries, and garden fruits, such as figs, currants and raspberries, &c. Grapes are cultivated with great success. The short distance and quick time by rail to Richmond, Baltimore, Philadelphia and New York enable shippers to put fresh fruit from this section into those markets, several weeks in advance of the fruits grown there.

As regards iron ores, the counties of Chatham and Moore in the South, and especially the famous Ore Hill and other adjacent mines, give a supply of the best high-grade Bessemer, red and brown hematites and magnetic ore that is almost limitless. Stokes, Surry and Wilkes counties, in the North and West, have large bodies of similar ores, not to say anything of the ores along the line of the Western North Carolina Railroad, that are in as large bodies of as pure ore as can be found anywhere else in the world.

The ores of North Carolina belong to the Archæan and Laurentian geological formation, and hence, are free from phosphorus, which is not the case with ores found in the paleozoic and carboniferous formation.

The largest bed of kaolin in the State is a few miles south of Greensboro. There is here a fine opening for potteries.

Greensboro is within easy reach of all kinds of forest trees used in the different arts, and for all commercial purposes. The spokes, hubs, handles and rims manufactured at Greensboro have given a reputation to the oak and hickory of this region for such purposes, equal if not surpassing, any in the world. The white hickory in Guilford and surrounding counties, for weight, strength, tenacity, and for susceptibility to fine polish, is pronounced by experts to be superior to any in the world.

South of Greensboro are immense forests of yellow pine—hundreds of thousands of acres—which are not yet within railroad reach. These lands can be bought at reasonable prices; and without great cost a railroad might be extended through this pine region.

Upwards of thirty large cotton factories are now in operation within a radius of forty miles of Greensboro. The importance of this town as a railroad center, furnishing such excellent facilities for transportation, and its proximity to such an abundance of raw material mark it as a locality destined to reach great prominence in the near future.

Greensboro is a desirable place for residence. The population is orderly, thrifty, energetic, genial and hospitable. It has great natural and artificial attractions. Beautiful residences, a profusion of shrubbery and flowers, and well-shaded streets and avenues greet the eye. Greensboro is appropriately called "The City of Flowers."

There are thirteen churches, two graded schools and one large Female College; also a seminary for the education of colored teachers.

The town is lighted with electricity and gas, and water works are being constructed. An appropriation of \$100,000 has been made to provide a system of sewerage and to pave the streets and sidewalks. There are here two of the largest and best-kept hotels in the State.

With all these advantages Greensboro only needed such an enterprise as this steel and iron company to begin the work of development on a large scale to insure its becoming one of the foremost industrial cities of the South. It does not need much figuring to see that the 2,000 acres of town land secured by this company will soon be worth a great deal more than the entire capital stock of the company.

Thus, the North Carolina Steel & Iron Co. starts out, and will make Greensboro what it is destined to be—one of the foremost cities of the South.

THE opportunities for money-making in the South are almost unlimited. The growth of that section is affording better chances for building up big fortunes by wise investments than the West furnished during the period of its most active progress. Regular readers of the MANUFACTURERS' RECORD keep posted as to the opportunities, and are thus able to make profitable investments. Why not do likewise?

Mr. R. KENNA CAMPBELL has organized the Bedford Electric Co. at Liberty, Va., capital \$30,000. The stock has all been subscribed and will be fully paid up. Mr. Campbell has also secured an exclusive franchise for 25 years to supply light, power and traction. The street lights will employ the Schuyler arc system. Just what system of incandescent lighting will be selected has not yet been determined.

NEW ENGLAND money is in demand. Last week a meeting was held at Waco, Texas, by prominent citizens to raise money to send a representative to New England to induce capitalists to invest in Waco.

THE greatest benefactor of this section is the man who builds a new mill or opens a new mine. He is the man that the South delights to honor.

## MIDDLESBOROUGH.

"The Wonder of the Age in Town Building."

ENERGY, CAPITAL AND SOUND JUDGMENT COMBINED.

Seventeen Million Dollars Already Invested or Under Contract for Industrial Developments That Will Furnish Employment to 12,000 Men.

The Foremost Iron and Steel Men of England at the Back of Middlesborough.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

MIDDLESBOROUGH, KY., Dec. 14, 1889.

If the leadership of Pittsburg in the iron and steel industries is ever to pass to a rival, that rival will be Middlesborough. "But where, and what is Middlesborough?" Well, as to the "what" and the "where," it is a regular, made-to-order modern municipality, capable of indefinite extension, and located at the railway strategic center of, perhaps, the fairest portion of the North American Continent. From the "Pinnacle," which overlooks the town one can gaze down upon the charming valleys of Kentucky, Virginia, Tennessee, North Carolina and Georgia, save where the view is intercepted by loftier peaks, highest among which towers Mt. Mitchell, 80 miles away, yet in plain sight so pure is the atmosphere. The town is located at Cumberland Gap, a noted pass in the South Appalachian range, a water-shed controlling the courses of many streams which feed rivers that find their outlets in the Ohio, the Atlantic and the Gulf. Railroads built, building and to be built shortly, will, ere long, place Middlesborough in quick communication with all our seaports from Norfolk to Galveston, as well as the great cities of the North, East and West, and the growing industrial centers of the Central South. Already the town has direct connections through the great Louisville & Nashville and East Tennessee, Virginia & Georgia systems of railways, and is not cramped for lack of outlets. Strategically considered from a transportation standpoint, Middlesborough is a veritable "hub," into which its founders propose to put as many different spokes as sagacity can suggest and enterprise backed by capital can supply.

"But who are its founders, and what do they build upon?" Middlesborough has a multiplicity of fathers, but its projector is Alexander A. Arthur, manager for the American Association, Limited, of London, paid-up capital \$1,250,000, and president of the Middlesborough Town Company, paid-up capital \$1,500,000, both of which stocks command a premium on the London Stock Exchange. The backers of Middlesborough are among the brainiest and wealthiest capitalists of England and America. They pin their faith in Middlesborough in the first place upon the fact, certified by the most capable experts, that the town site is right in the midst of exhaustless stores of fine quality of coking coals, high-grade brown and red iron ores, with limestone all about. Coke, iron, lime—the triple arch for the support of the fabric of fortune. Such is the basis upon which the future of Middlesborough rests; and to secure the future of Middlesborough is the primary and constant object of its projectors, however vast the schemes subsidiary to that end they may undertake. Again, in the second place, Cumberland Gap is a natural railway center, as it was the



meeting place of the buffalo and Indian trails and the stage routes of our grandfathers. Its possession was fiercely disputed by the rival armies in the civil war, and the conception of a Middlesborough might have entered the minds of not a few of the combatants, but it was left to Mr. Arthur to grasp the possibilities of the historic spot and organize the truly stupendous enterprise here executing. One may say *enterprise*, for all the projects are correlative and subordinate to the one primary purpose, the establishment here of a great and populous center of diversified industry. For not only is Middlesborough blessed with limitless stores of coal, iron and limestone, but manganese, zinc, lead, building sandstone, fine multi-colored marbles, clays for brick, fire-brick, terra cotta and pipe, first quality kaolin, varied hardwood timbers and tan bark abound and invite skill and capital to ring all the changes of industry with a full set of bells. Bracing mountain air and pure mountain water realize here the ideals of healthfulness, and not the least bold among the projects to be executed here is the scheme of the Cumberland Park Company, which is to establish a hotel, casino and sanitarium for which the splendid climatic conditions, magnificent scenery and great variety of mineral springs afford the foundation. The resort will be known as Dillwyn Springs and is intended to rival the famous Spas of Europe in completeness of equipment and elegance of appointments. The buildings, designed by eminent architects, are to be erected during the coming year at a cost of \$750,000. One learns to grasp big figures here, but all the enterprises thus far announced are strictly legitimate and have either been executed or are as certain of completion as honest purpose and ready means can warrant. And this is true of the Dillwyn Springs project. The Park Company has a capital of \$1,400,000, and the sanitary details of construction in the buildings are to be directed by Dr. John S. Billings, surgeon United States army. Attached to the sanitarium will be a spacious hospital supplied with the latest scientific appliances and apparatus, as well as baths of every sort, massage and Swedish cures, &c. The Medical Advisory Board is composed of some of the foremost physicians of Europe and America. The infinite variety of attractions which this region offers for the lover of nature in her finest aspects for the health-seeker and the sated *habitués* of long-established resorts should conspire to make Dillwyn Springs the Saratoga of the South.

Middlesborough is building "from the ground up." Middlesborough is a plan, or rather it is a plan startlingly largely executed. In May last, population not more than fifty—largely squatters. Today, fully 4,000 live, "hustling," earnest, resolute and confident residents housed under the roofs of Middlesborough. A young city of the latest improved pattern. Truly an impressive contrast.

The property of the American Association, Limited, comprises 60,000 acres in the immediate vicinity of Middlesborough, lying in the three States of Kentucky, Tennessee and Virginia, on both sides of the Cumberland mountains. The site of Middlesborough is Yellow Creek Valley, on the west or Kentucky side of Cumberland Gap. It is by far the largest area of level land in this vicinity, and comprises about 5,500 acres. Nature would seem to have provided it for the purpose for which it is now selected. The valley was chosen for the site of the proposed town, and it was named after Middlesborough, the great manufacturing town in the Cleveland district of England. The American Association, Limited, and the Town Co. have correlated plans of developing Cumberland Gap and Middlesborough. The former will lease on royalties its coal, iron, clay, timber and

quarry privileges, rent cleared farms on reasonable terms, and sell or lease lands suitable for manufacturing industries of all kinds. The Middlesborough Town Co. have regular stated sales of lots for business and residence purposes, and make advantageous terms for private sales. They offer special inducements to manufacturers locating industrial plants. Such are the plans of development; and up to December 10th the investments made here, or contracted for, footed up the startling total of \$17,000,000. At the ratio of progress in prospect here, the "unearned increment" of Middlesborough land promises to defy approximation.

As master minds are directing this vast enterprise, the first move made was a master stroke. This was nothing less than the boring of a tunnel under Cumberland Gap for the use of all the railways built to Middlesborough. Every step taken here has its calculated train of consequences—one might say necessary consequences, for necessity and sound judgment have often the relations of cause and effect. The tunnel, 3,750 feet long, makes Middlesborough a railroad center at once, to all intents and purposes, for there is not a railway within striking distance of the town that will not reach here by direct extension or branch connection by the time that the great enterprises now in progress or contracted for are completed. The rival roads will "be confronted with a condition," and will be quick to grasp its requirements. All the highways in this section lead to Cumberland Gap, and so, too, shortly must existing and future railways. Several important extensions and new lines are already working directly toward or for the readiest connection with Middlesborough. "Everything comes to him who waits," says one who banked on Time, but Middlesborough does not propose to wait. She discounts Time's favors by self-reliant energy. She does not "want the earth," but she has a fair section of its surface upon which to spread over, and she is spreading, as a compact summary of the results of the work done here during the past six months will convince the most skeptical:

SUMMARY OF MIDDLESBOROUGH'S DEVELOPMENT.	
	Capital involved.
American Association, Limited, owns 60,000 acres coal, iron and timber lands. Employs 75 men.....	\$2,000,000
Middlesborough Town Co. owns 5,500 acres town lands; about 500 acres platted; 5,000 acres unplatted. Employs 100 men.....	2,000,000
Knoxville, Cumberland Gap & Louisville Railroad Co. owns 68 miles railroad and Cumberland Gap tunnel. Employs 200 men.....	2,000,000
Middlesborough Belt Railroad Co. Owns Belt Railroad, in course of construction around valley of Yellow Creek; about 15 miles.....	250,000
Middlesborough Street Railway, narrow gauge, \$25,000. Operates narrow gauge dummy line through Middlesborough. Employs 50 men. This railroad is to be extended into an electric railroad and mining railroad, to operate mining spurs, street railways, &c. Capital, \$250,000.....	25,000
Cumberland Valley Extension L. & N. Railroad. Employs in Middlesborough 25 men. Capital involved \$2,000,000.....	
Powell Valley Extension L. & N. Railroad. Capital involved \$1,000,000. Men employed at Cumberland Gap, 150. In course of construction.....	
Allison, Shafer & Co., contractors. Employ in Middlesborough improvements 500 men.....	150,000
R. H. Fox, contractor. Employs in Middlesborough improvements 250 men.....	25,000
Lumber Department American Association, Limited. Works 8 saw mills, 2 planing mills and large dry-kiln, besides smaller works. Employs 250 men.....	150,000
Machine Shop Department American Association, Limited. Employs 15 men.....	30,000
Middlesborough Electric Light, Heat & Power Co. Operates electric-light plant for city. Employs 15 men.....	250,000
Middlesborough Water-works Co., temporary arrangement. Employs 10 men; furnishes 50,000 gallons water per day. This company will be enlarged into a water-works co., with a capital of \$250,000 and works to furnish five to six millions gallons water per day.....	15,000
Middlesborough Cemetery Co. Fifty acres.....	50,000
Middlesborough Iron, Steel & Coal Co. G. L. Reis, manager. Building 2 furnaces, 300 tons capacity. May commence building of 2 more within six months; will employ about 2,000 men. May add a rolling mill.....	1,000,000
Watts & Co., Limited, London, England. Basic steel works; will em-	

ploy about 500 men. In connection with these works there will probably be established with additional capital a nail-rod mill, a light-sheet mill and a steel-nail works.....	500,000
Cumberland Gap Charcoal Iron Co. Begins 1st January. O. W. Davis, Jr., manager. Two charcoal iron furnaces. Will employ 1,000 men in woods, at ovens and furnaces. This company undertakes to introduce in connection with other works, and with additional capital, a car wheel works and a chilled-iron works.....	500,000
Middlesborough Tannery Co., Messrs. Hall & Vaughan, New York. Ultimate size works, 600 hides per day. Will employ 500 hands at works and 3,000 hands in woods in barking season.....	500,000
Eades, Mixer & Heal, zinc company. Will employ 200 men. Value of lot, \$21,000. The contract with the Zinc Works Co. covers an agreement to introduce works to manufacture galvanized iron wire, galvanized sheet iron, brass and copper wire, and a brass foundry, with extra capital.....	75,000
Middlesborough Land & Improv. Co. Middlesborough Building & Investment Co. Employs 50 men.....	100,000
Middlesborough Wood-working Co. Employs 25 men.....	75,000
Middlesborough Hotel Co. Will employ 60 men. Manager, Asa Loomis. This capital may be increased to \$250,000; additional hotel room will be required within 1800.....	50,000
Cumberland Hotel, H. E. Clay, manager. Employs 12 men.....	25,000
Dillwyn Springs Hotel, F. Ainslie, manager. Employs 10 men.....	25,000
Talbutt & Co. Hotel.....	25,000
European Hotel, boarding house.....	5,000
Veal House, boarding house.....	5,000
Huling House, boarding house.....	2,500
Opera House.....	7,500
Middlesborough Power Co., 250 horsepower. Contracts to furnish 14 small industrial enterprises.....	30,000
Middlesborough Handle Co. Employs 150 men, in woods and at factory.....	75,000
Middlesborough Steam Laundry. Employs 75 men.....	7,500
Middlesborough Casket Co.....	25,000
Middlesborough Furniture Co.....	50,000
Middlesborough Bent Wood Co.....	15,000
These last three are Michigan enterprises. Will employ 150 men.....	
Vinson & Graf, planing mill. 10 men. Value of plant and lot.....	30,000
Chapman & Co., planing mill. 15 men. Value of plant and lot.....	30,000
Middlesborough Town Co., oil house. Employs 5 men.....	1,500
Middlesborough Town Co., artesian well. (Mineral water).....	4,500
Middlesborough Brick & Tile Co. Employs 15 men.....	75,000
I. U. Addison, brick lessee. 5 men.....	5,000
J. W. Byr, brick lessee. 5 men.....	5,000
E. & F. Watts, brick lessee.....	50,000
Cumberland Gap Fire Brick Co. Begin 1890.....	50,000
G. L. Reis and others, fire brick lessee. Plant ordered.....	25,000
O. W. Davis, Jr., and others, fire brick lessee.....	25,000
P. W. Hardin, private bank. Contract to bore for oil, gas and mineral water. 10 men.....	25,000
First National Bank Middlesborough. Peoples Bank of Yellow Creek.....	100,000
Bird & Co., private bank.....	50,000
Crane & Co., private bank.....	50,000
Second National Bank Middlesborough. Rogers & Keaton, private bank.....	50,000
Middlesborough Building Co., Hubble and others.....	150,000
Middlesborough Loan & Trust Co., (branch from Minneapolis).....	1,500,000
Louisville Savings, Loan & Building Co. (Branch) \$5,000,000.....	
Middlesborough News.....	2,500
Town Co., telegraph department.....	5,000
Town Co., telegraph department (under lease J. C. Duncan).....	200,000
West End Land Co. (Hull and others) Cumberland Gap Park Co. Sanitarium, hotel, casino. Accommodation for 200 patients and 600 guests. Company owns 500 acres, and may enlarge capital to establish and maintain model village. Lots to be sold for residence purposes exclusively.....	1,000,000
Gap Land Co. (Curtis and others).....	50,000
Middlesborough Steel, Iron & Coal Co. Iron lease, 3,000 acres; dead rent, \$5,000. Capital to be employed.....	50,000
Cumberland Gap Charcoal Iron Co. Ore lease, 3,000 acres; dead rent, \$2,000; timber lease, dead rent, \$2,500. O. W. Davis. Coal lease, 1,000 acres; dead rent, \$10,000. Capital to be employed.....	50,000
G. R. Eager, Boston, Mass. Coal lease, 1,000 acres; dead rent, \$5,000. Capital to be employed.....	100,000
Evans & Gent, Bramwell, W. Va. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	25,000
J. W. Ralston, Knoxville, Tenn. Coal lease, 1,000 acres; dead rent, \$10,000. Capital to be employed.....	50,000
Robert Ralston, Knoxville, Tenn. Coal lease, 1,000 acres; dead rent, \$10,000. Capital to be employed.....	50,000
E. E. Malcolm, Middlesborough, Ky. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
Evan Jones, Bramwell, W. Va. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
C. W. Livermore, Middlesborough, Ky. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
H. Holbrook, Curtis, New York. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
J. A. Jardine, Birmingham, Ala. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
E. J. Delean, Birmingham, Ala. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
H. M. Harris, Covington, Ky. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
Barker & Gray, St. Louis, Mo. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
S. A. Forbes, Ashland, Ky. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	50,000
G. L. Reis, Middlesborough, Ky. Coal lease, 500 acres; dead rent, \$5,000.	50,000

Capital to be employed.....	\$0,000
Joseph Lowe, Bramwell, W. Va. Coal lease, 500 acres; dead rent, \$5,000. Capital to be employed.....	25,000
S. W. Groome, Philadelphia, Pa. Coal lease, 1,000 acres; dead rent, \$5,000. Capital to be employed.....	100,000
Middlesborough Ice Co. Capacity six tons per day.....	25,000
MEMO.—All coal leases are made subject to beginning of work in the Lessees may make coke for local use and shipment. Each colliery will employ from 100 to 150 men.....	
Nabor & Co., planing Mill.....	15,000
Nunnally & Co., contractors.....	25,000
New York syndicate, 15,000 acres coal lands.....	250,000
Williamsburg syndicate, 10,000 acres.....	1,000,000
London syndicate, 200,000 acres.....	1,000,000
Danbury syndicate, 6,500 acres.....	150,000
Stearns Lumber Co., 2,500 acres.....	37,500
Laurens Syndicate, No. 1, town lands.....	

Middlesborough Land Co.....	
Ashville Land Co.....	
Eastern Kentucky Land Co., lands.....	
Divine & Co., town lands.....	
Total capital involved.....	\$17,463,500
No. of men to be employed in enterprises already built and contracted for.....	5,997
No. of miners to be employed in mines already under contract to be developed, about.....	5,900
No. of men to be employed tributary to Middlesborough in tannery, charcoal works, &c., about.....	3,700

NOTE.—The American Association and the Town Co. have reserved on their properties lands valued at \$335,000 for railroad purposes. The total as given above (\$17,463,500) does not include the \$3,000,000 or more expended by the Louisville & Nashville Railroad in the construction of its two branches to Middlesborough.

The population in Middlesborough, May, 1889, was fifty souls; in December, 1889, 4,000.

The Town Co. sold in town lots by private and auction sale, between May and October 19th, 1889, \$416,000 worth of property, being about 500 lots; and between October 19th, and December 4th, they sold 472 lots for \$711,000. This leaves the Town Co. still with about 5,000 acres of land, around which a belt railroad is now being built, and through which the electric and steam street cars are being run and extended.

Up to the first of October, buildings of all kinds erected and occupied, aggregated in value \$350,000. There are now, 10th of December, under construction buildings aggregating, in addition, \$240,000, and the last sales oblige the buyers to put up \$366,000 worth of additional buildings between the first of January and first of May, 1890.

There are seven churches under construction; namely, the Episcopal, Methodist, North and South, Presbyterian, North and South, Christian, and Roman Catholic denominations. In addition to this, there is a large school-house now ready for occupancy, built by the Town Co.

A lot for a trade's school has been given to some gentlemen interest in incorporating an institution of this kind, which will evolve into a school of technology.

Bishop Mayes, of Covington, (R. C.) is interested also in establishing an undenominational hospital.

The Town Co. is building a town hall and fire engine station, a very large exhibition hall, a free library, and other public buildings.

The industrial enterprises in operation and definitely secured, to be constructed as rapidly as possible, will employ about 5,000 hands; the coal leases already made, about 2,500 miners; and about 3,700 men will be employed in the woods tributary to Middlesborough getting out timber, bark, charcoal, &c., for Middlesborough enterprises, making a grand total of over 12,000 men that will find employment in the enterprises so far secured for this town.

From the foregoing it is quite obvious that Middlesborough not only has a great future in prospect, but a decidedly impressive present, which is kaleidoscopic in its bewildering variety of ventures undertaken and contracted for. Undoubtedly, in the way of town building, Middlesborough is the most phenomenal exhibition of energy, sound judgment, solid backing and *bona fide* "materialization" yet seen in this generation of "booms" and "boomers." There is no "boom" here, however. Everything is planned, and results follow in calculated, logical sequences. To sum it all up in a sentence, Middlesborough is an applied lesson in political economy worthy of the study of the best intellects of our time.



# FAIR FLORENCE.

**The Flourishing Center of  
Attraction in Alabama.**

**A Beautiful Town Splendidly  
Located on a Great River.**

**CAPITALISTS CROWDING TO  
FLORENCE AND INVEST-  
ING HEAVILY.**

**The Largest Cotton Mill in the  
South Under Construction.**

**A Wide Diversity of Manufacturing  
Interests Based on Coal, Iron,  
Cotton, Timber, &c.**

Spec. corresp'dence MANUFACTURERS' RECORD.]  
FLORENCE, ALA., Dec. 14, 1889.

What wonderful transformations are sometimes wrought by the pushing, driving energizing forces in live, wide-awake, enterprising men. As an illustration of this mark the developments already made in Florence through the superior judgment and untiring spirit shown by those men who undertook to build a thriving manufacturing city here. They found here as a nucleus a quiet, sleepy, finished town typical of the old regime with a cultured, refined society; its people were not content to see a rival spring up almost in a year that threatened to draw the most active members of the community away, and something must needs be done. I recall now my visit to this place in 1884, and when the reports came of the awakening here and the activity in real estate and of the inauguration of this enterprise and that enterprise and another and another I thought me that much good *did* come out of Nazareth. I pictured the place with a boom on as an ancient dame with a very large bustle and high-heeled shoes. Seventy years ago the Cypress Land Co., composed of David McKinley, afterwards a justice on the supreme court bench of the United States, General Jackson, James Jackson, General Coffen and Colonel Leroy Pope, selected a town site here. A sale of lots took place, and some lots sold as high as \$3,500 for a half acre; James Jackson paid \$10,100 for a lot about where the present railroad bridge is situated. The sale of lots amounted to \$319,513. Lands throughout this section at that time sold for \$100 an acre; this was on account of the richness and fertility of the soil and the nearness to water transportation, as in those days the only means of carrying freights were the wagon-roads and water-ways. Throughout the whole of North Alabama and Tennessee the people were accustomed to bring their products to Florence hundreds of miles and to carry away heavy groceries and merchandise of all classes from the immense warehouses here. As cotton came to be an important production the business increased enormously. Long wagon trains arrived day and night, their procession marked by white covers in train by day or camp fires at night for miles. The largest Mississippi steamboats met them here at this entrepot at flood tide in the river and depositing their cargoes of merchandise, stocking their decks with five and six thousand bales of cotton, these grand argosies were borne on the bosom of the majestic river to New Orleans. Truly these were flush times in Florence, which continued up to about 1855, when the completion of the Memphis & Charleston Railroad opened up other means of commercial intercourse for her territory and thus sapped the town's business arteries.

## MUSCLE SHOALS.

In 1832 the work of digging a canal around the great Muscle shoals was undertaken by the State of Alabama under a large grant of public lands for the purpose from the general government. In 1840 this work had progressed so as to admit of flat-boats passing through, but it was impossible for steamboats; but even this temporary improvement gave away under the telling force of floods so that it was abandoned. In 1876 the great work of constructing a permanent canal around these shoals some fifteen miles in length was undertaken by the United States Government and has been prosecuted to a successful conclusion with a total expense of some four millions of dollars. During the coming spring the canal will be thrown open to regular navigation with great rejoicing and much eclat on the part of the towns and cities along the river.

I visited the lower end of the canal a few days ago and was fully repaid for my ride of nine miles over a good road. The work is superb, and the masonry of the locks and dams and the great aqueduct is imposing and of the most finished kind. The view at the aqueduct is one of the finest anywhere in this country. The laughing river sports and plays about islands and over numberless shoals that are of striking groupings—one large, one being a well-formed arrow head—dancing and rolling in its majestic sweep of three miles in width, it flows into a deeper channel a mile below and in a more sober and useful bearing passes by Florence.

The twenty years of Florence's history prior to 1886 was one of steady decline in her affairs. New towns were springing up near by; the impatience of her more youthful and enterprising citizens for the activity of other communities; the blighting effects of the devastation of war, and the demoralization incident thereto, all contrived to place her upon a rapid decline until the means of support for a large part of her rapidly decreasing population was an important question. The population had dwindled down to 1,500 souls, and the place was menaced with annihilation, so that those remaining were seriously considering the question of how soon they would be forced by necessity to move to their new-founded rival across the river—Sheffield. It was the deadest town in Alabama with one exception—Cahaba—the first capital of the State, whose capitol buildings, that echoed with the eloquence of some of the State's most gifted sons, had already fallen under the ravages of decay and the encroachments of the Alabama river, and whose homes and fine store-houses had become the habitations of bats.

## REJUVENESCENT.

Great is he who founds a city, but greater still the man who revives a dead one. Dr. Brown Sequard may have discovered an elixir that will renew the youth and vigor of old men, but here, in this community, was one man who aroused a people given over to the lethargy of dreamful ease, and pulling them together with unfailing devotion and unflagging energy, joined them in an effort to recoup their losses and to build here a flourishing city. This is none the less remarkable because the man was past the prime and vigor of manhood and ripe with experience in a school that was noted for its conservatism and berated for its lack of progressive spirit and enterprise. Judge Wm. B. Wood labored for several years to get up a scheme of co-operation among the people of Florence and a pooling of their property interests, with a view to offering substantial inducements to capitalists and manufacturers to come and build a thriving city. In a great measure he succeeded in uniting the citizens and property owners in and about Florence.

THE FLORENCE MINING AND MANUFACTURING COMPANY

was organized in November, 1886, with a

capital stock of \$3,000,000 on a cash basis of \$400,000. Of this \$285,000 in money was paid in, and lands at a low valuation, aggregating \$115,000, being altogether 13½ per cent. of the stock. The realty consisted of 3,000 acres of town lots and adjacent sites, and 30,000 acres of valuable mineral and timber lands in this district. Out of this the parent company has grown other companies that are doing much to develop the rich resources in and about Florence. In May, 1888, Dr. J. S. Lawton, of Atlanta, Ga., made a proposition to the Florence Mining & Manufacturing Co. to locate in Florence manufacturing enterprises, with a total capital of \$1,000,000, in consideration of certain concessions, which was accepted by the first named company. The parent company has been well managed and wisely directed by able officers. Judge Wood, its first president, actively and zealously guarded its affairs, and the result was an awakening of the old town that simply paralyzed the doubting Thomases and non-progressive members of the community. It was not long ere "Florence, the New," was the most talked-of town in the United States. Even magic Birmingham, in all the fullness of a vigorous growth, was forced aside while the people asked "What about Florence?" In my travels the past summer I was impressed with the number of inquiries made of me about this growing town in my native State.

Owing to ill health, Judge Wood was forced to retire from the presidency of the company, but he shows as lively an interest as ever in the building up of Florence, although he has been confined to his room for several months. Mr. A. W. Stockell is the president of the Florence Land, Mining & Manufacturing Co., and Mayor E. B. Comly, formerly of Ohio, is the general manager. I am indebted to these gentlemen for the inside facts about the company and its condition. President Stockell called my attention to the very low valuation of the 30,000 acres of timber and mineral lands, and some 3,000 acres of town lots. After liberal grants to the Florence Railroad & Improvement Co., the company still owned real estate sufficient to make the stock ultimately worth fifty times the original cash value of 13½ cents. If a majority of the original stockholders had shown a proper spirit of interest and active co-operation at the outset, there is no doubt but that the first feeble steps would quickly have become vigorous moves, and the present gigantic strides would have already poured a tide of wealth into their purses, and into all the channels of the growing community. This company, under a wise management, has reduced its capital stock 879 shares the past year. The board of directors decided to change the plan of sale to one-third cash, the balance payable in one and two years with interest, with the privilege to the purchaser to pay the deferred payments in stock of the company at forty cents on the dollar. This has operated, first, to create a large cash fund for development; secondly, to enhance the value of the stock and strengthening it in the general market. During the past year a legitimate dividend of \$1 per share has been declared, with the cheering evidence that, whereas the original cash basis of all values in the company was \$400,000, yet a conservative estimate of the real estate on hand puts it at over \$2,000,000, and this too notwithstanding the diminution of quantity by sales and donations, with greatly enhanced value to the remainder thereby. The company has already personal assets sufficient to pay an annual dividend for five years to come of \$1 per share, or 7½ per cent. on the original value. This company owns about 8,000 lots in the town, and in the line of the greatest activity of improvements; much of this property is directly along the Louisville & Nashville and Florence Northern railroads.

## THE FLORENCE RAILROAD AND IMPROVEMENT COMPANY.

This company was the first-born of the parent company, and received valuable concessions from it. For one thousand acres of town property and four thousand acres of mineral lands the Railroad and Improvement Company contracted to secure the erection of one million dollars of capitalized cash value industries to locate in Florence within two years from that time, May, 1888. The two giant intellects and energies that have labored unceasingly and with unflinching confidence—Judge W. A. Hudson and Major J. H. Field—began already to sniff the refreshing breezes that fan the toiler upon the pinnacle called success. This company capitalized at \$4,000,000, and placed one million dollars of the stock on the market at 20 cents; with the \$200,000 thus acquired they began the work that has done more to make Flourishing Florence already hum with many and diversified industries than any city in Alabama.

Diversity of manufacturing industries is the key to the situation of the future, when the fight for steady growth and prosperity, year in and year out, is to decide the survival of the fittest. The Railroad and Improvement Company sent out its agents, men of gentlemanly address and discriminating judgment, and invited and brought capitalists and manufacturers and investors to see the exceptional location for a great city. The tide that was slowly drawn towards Florence at first has now increased to remarkable proportions. Last week I had the pleasure of mingling and conversing with capitalists, furnace owners, manufacturers, composing three large parties who came to spend a few days investigating thoroughly the situation; and what then? they all went in handsomely in stocks of different enterprises, lots, and one large party from Philadelphia, satisfied with a thorough investigation of the ore fields and the facilities for making good iron at a very low price, organized

## THE COTTON, COAL & IRON CO.,

with \$2,000,000 dollars capital, all paid up. They will build at once a large iron furnace and a rolling mill; to be quickly followed by a cotton factory, with a plant to cost \$500,000, and some of the stockholders and directors in this company are members of the Manufacturers' Club, of Philadelphia, composed of many of the wealthiest manufacturers in Pennsylvania.

The following gentlemen compose the board of directors:

Judge W. A. Hudson, president.  
Mayor J. H. Field, general manager.  
Robt. Dornan, carpet manufacturer, Phila.  
James Pollock, carpet manufacturer, Philadelphia.  
Thomas Stinson, carpet manufacturer, Philadelphia.  
Abram S. Patterson, iron manufacturer, Philadelphia.  
John W. Dickey, banker, Philadelphia.  
Jno. W. Eckman, iron manufacturer, Philadelphia.

Their furnace is very properly to be named "The Philadelphia." Mr. A. S. Patterson, who stands at the top as an expert iron man in this country, said that he was very favorably impressed with Florence and with her iron ore properties; that he and his associates came to make a careful inspection and after doing so were sufficiently impressed to arrange to build a blast furnace at once. He was greatly impressed with the advantages of the river as an outlet guaranteeing low freights. Mr. Patterson will return to Florence from time to time to superintend the construction of the furnace.

In a speech in Florence, Mr. Patterson said: "I came South once, in '86, to Virginia. My friends laughed at me, and said, 'what do you want to go down there for?—nothing there!' 'Well,' I said, 'I am going to see; and the result of the business was



myself and friends joined together and we built a furnace at Pulaski, Va., which I think is one of the finest plants in America for its size; and I was able to ship iron North from this furnace when my own furnaces in Pennsylvania were idle, and sell it to my own customers cheaper. We can do it in Alabama. The natural advantages in Florence are superior to Virginia.

Now in regard to that river (referring to the Tennessee), gentlemen, it is going to be the greatest source of your wealth, and I am surprised that you have not used it before, as I understand four steamboats have been here this week.

What Florence wants now is to organize a steamboat packet line with plenty of barges, so that you can move your goods and iron to the markets and take advantage of what the Lord has given you. You have plenty of iron ore, easily mined, on the line of a railroad, and the pig iron will be of excellent quality; and when we get this furnace built, about a year from now, with the best and most approved appliances, we will demonstrate to the other iron districts of Alabama and the South that we can, if need be, undersell any market in the East or in the West."

Mr. James Pollock, secretary and treasurer of the company, will take a lively hand in developing their valuable properties, and if, according to his own confession, he can make woollen goods out of cotton, and, as an envious friend said, even out of jute, then he certainly will make a grand success of the great cotton mill, with abundance of raw material at its doors and the finest of water power. This water power is furnished by Cypress creek, a bold stream large enough to be called a river, in New Jersey. Its waters are clear and with its fountain head in the far-off hills, whose pure springs give it a steady volume, it affords a water supply for the town that is of itself incalculable in value. The water supplied to the consumers of Florence will be drawn from this unpolluted source. The creek takes a romantic course, winding through the hills and knolls in a perfect S, thus concentrating the power within a reasonable space for practical purposes, and will enable the owners to build up a series of factories and bring the operatives into one community and not too far distant from any one of the plants.

The road along the creek is a lovely drive, and at any season of the year is inviting; it passes under tall monarchs of the forest, crosses the pretty stream on a fine iron bridge, and brings into view here and there a waterfall by an abandoned site of "days of long ago"; past the walks and shades of a park almost planned and plated by nature, while from the brow of a hill one may pause and study the prospect the semi-coil of the creek's S course brings into view at two different points in the stream, measured by its windings, widely apart. Down at the foot of the hill is the picturesque cotton and tapestry mills. The situation would delight the eye of an artist with its dammed, pretty stream for a background. This mill is turning out a superior quality of yarn, for which there is a very profitable market. It makes also fancy cotton lap-ropes, table-covers, counterpanes, and another part of the plant makes beautiful tapestry, such as curtains, etc. I saw there a pair of curtains that would well grace a beauty's boudoir or hide a courting couple from the chaperon. Their products received premiums and especial mention at the exposition recently held in Montgomery, Ala. There was also exhibited there another novel display: a full outlay of the finest builder's hardware in bronze, such as locks, hinges, knobs, bolts, ratchets, gong-handles, all of exquisite design and finish, and handsomely embellished, the product of the F. H. Foster Manufacturing Co., at their extensive works in Florence. This exhibit arouses unusual interest among Southern men, because it shows the possibilities

of diversity of industries, and such goods manufactured in the extreme South is truly an innovation. Diversity—that is the talismanic word that will throw wide open the gates of prosperity to Florence. Indeed, it will shut her in as against many other communities now competing in generous rivalry with her, and that too in the near future. Here are the industries and contributing enterprises already secured:

This includes none but what are here:

Florence Land, Mining & Manufacturing Co.	\$3,000,000
Florence Railroad & Improvement Co.	2,000,000
Florence Cotton & Iron Co.	2,000,000
Lauderdale Manufacturing Co.	1,000,000
North Alabama Furnace, Foundry & Land Co.	1,000,000
Sweetwater Land Co.	25,000
Florence Educational, Land & Development Co.	300,000
Riverside Land Co.	30,000
Florence Investment Co.	1,000,000
Florence Building & Improvement Co.	250,000
Florence Building & Loan Association.	150,000
Florence Building Co.	100,000
Florence Park & Improvement Co.	25,000
Central Land Co.	25,000
First National Bank	100,000
W. P. Campbell & Co., Bankers	100,000
Florence National Bank	50,000
Nashville, Florence & Sheffield R. R. Co.	2,000,000
Memphis & Charleston R. R. Co.	16,000
Florence Northern R. R.	2,000,000
Florence Ice Co.	10,000
Florence Electrical Manufacturing Co.	10,000
Florence Electric Light & Power Co.	10,000
Southern District Telephone Co., 175 subscribers	\$50,000
Florence Dummy Railroad Co.	200,000
Cypress Water Co. (Jeter & Boardman, G. & W. Co.)	10,000
Iowa Land & Lumber Co.	300,000
F. H. Foster Manufacturing Co.	30,000
Florence Woodmen Works	10,000
Russell Spoke & Handle Factory	10,000
Florence Planing Mill Co.	10,000
Geo. E. Bennie Bucket Factory	30,000
Florence Stove & Manufacturing Co.	25,000
Florence Canning Co.	3,000
Eagle Roofing & Paint Co.	30,000
Florence Chemical Works	100,000
Sweetwater Shoe Manufacturing Co.	100,000
Curry Cotton Cultivator Co.	20,000
Florence Brick & Contracting Co.	10,000
Mills & Story Stone Co.	10,000
Florence Marble Co.	10,000
The Reynolds Mill & Lumber Co.	25,000
Florence Tapestry Works	10,000
Browning Iron Fence & Railing Co.	5,000
Florence Suspender Co.	100,000
Florence Flouring Mills	10,000
Florence Publishing Co.	10,000
The Banner	50,000
The Gibson-Hilliard Manufacturing Co.	50,000
Alabama Alliance Exchange	250,000
W. B. Wood Furnace Co.	250,000
Florence Steam Laundry	250,000

I must not fail to notice the excellent product of the spoke and handle factory, which make its goods from the best hickory and oaks, abundance of which is had near by at very low prices. The stove works are doing good work, and the wagon works have a splendid plant with a yard full of seasoned stock, and are just about ready to begin work. They will employ 300 hands, and expect to turn out 10,000 wagons a year. All these works are flanked on one side by the river close by, and the belt road on the other side, a most excellent arrangement.

I am sure the Curry Manufacturing Co. has a bright future, and why should they not in time assume proportions as extensive as the great McCormick Reaper works? They manufacture the Curry Agricultural Cultivator. Its use in time is bound to solve the question of cheap cotton culture, just as the steam plows and self-binders and reapers cheapened bread by making it possible to plant and glean thousands of acres of grain with a nominal amount of manual labor. With its use one machine supplies the place of sixteen hands, with a corresponding decrease of mule power. It will, with one hand and a pair of mules, prepare the ground, skipping the stumps, sow and cover the seed, chop out "the stand," and finally cultivate the young plants with a more thorough and uniform system than will sixteen careless negroes, hung to as many plows hitched to sixteen mules. It will make it possible for a man to sit on his machine in the hot sun sheltered by an umbrella, and cultivate sufficient acreage to make from 50 to 100 bales of cotton. I know a Yankee that is doing it successfully on land he paid \$5 an acre for, and he has brought it up to  $\frac{3}{4}$  of a bale to an acre in two years, and says he is bound to make it a bale to an acre. And he will do it. There is no prettier machine made, and the chopper reproduces the elbow motion in a "hand's" stroke with a hoe to a mar-

velous nicety. The machine is finally perfected after years of study and toil, and my friend, Capt. J. B. Curry, is certainly worthy of the success achieved. The Lauderdale Manufacturing Co. own valuable properties east of the old town, but adjoining the property of the Florence Mining & Manf. Co. They are proceeding with systematic and good management to develop their properties. Mr. Samuel J. Graham is the manager of this company. The Florence Investment Co. own a large amount of selected real estate in Florence. Their capital stock is a million. The Boston party that visited here this week invested to the amount of \$50,000 of this stock and took an option \$100,000 more at 50 cents, the market price. This party came under the escort of Mr. E. E. Smart, the New England agent of the land company. He is a gentleman of charming address, and a stockholder in the Furnace Company, the Florence Investment Co., and other enterprises. He expects to personally conduct a large party from New England to Florence about the last of January. The following gentlemen came with him on his recent return:

John A. Gale, president Second National Bank, Haverhill, Mass.

John Pilling, one of the largest shoe manufacturers of New England, Haverhill, Mass.

George A. Green, from Green & Nichols, large shoe manufacturers, Haverhill, Mass.

Capt. A. W. Hayes, wealthy retired merchant and capitalist, Rochester, N. H.

A. W. Hyde, capitalist, Rutland, Vt.

N. P. Kingsley, banker and capitalist, Rutland, Vt.

Clinton Smith, Middlebury, Vt., contractor and builder of public buildings.

A. N. Batchelder, Plainfield, Vt., large lumber manufacturer.

Dr. E. T. Hubbard, Rochester, N. H.

Geo. A. Shaw, Springvale, Me., druggist.

C. S. Carl, So. Waterboro, Me., merchant.

C. S. Buck, merchant, Rochester, N. H.

M. S. Parks, retired merchant, Richmond, Me.

A. H. Beedle, merchant, West Randolph, Vt.

I. D. Litchfield, merchant, West Randolph, Vt.

Fred. G. Hagan, real estate, Providence, R. I.

L. E. Lindsay, merchant, Laconia, N. H.

Thos. H. Hill, real estate, Woburn, Mass.

#### RAILROADS.

Florence will soon be in the most commanding position of any Alabama city. The East Tennessee, Virginia & Georgia (Memphis and Charleston division) taps the place. That great civilizer and developer, the Louisville & Nashville system, reaches out its strong arm to the thriving place from its Nashville division. The Florence Northern, already graded, will be rapidly constructed to connect with the Tennessee Midland, passing through the great iron-ore fields. The Sheffield & Birmingham will soon be brought into Florence and will bring the coal and coke from the Warrior coal fields. There are plans on foot to construct an air line railroad from Florence to Birmingham that will open up an entirely new and rich territory. Such a road would, with the Florence Northern and a road soon to be built from Birmingham to Pensacola, make a grand trunk line from St. Louis to Pensacola.

A Vermont, who fled from the snows of the Granite State, told me he waded to the depot through snow eight inches deep; and when I saw him he had been reveling in glorious sunshine for a week. Florence streets are wide, ample avenues, with an abundance of shade. The most remarkable thing I saw was the surfacing material for the streets and roads; it is a conglomerate of cement that packs to sufficient firmness to make a splendid roadway, and at the same time is more elastic than asphalt or stone, and cheaper too—yes, as cheap as

dirt. The roads laid with it are equal to any shell-road in the world, and there are no shell-chips flying into your face when speeding a good horse. The best point about Florence is her well-organized, refined, intellectual society. It is a city of homes. During the past two years there has been erected in the place two thousand homes. New and striking architectural gems are on every hand; the modest cottage and the costly palace. Looking to the far future one may contemplate the status of society here; this present nucleus with its learning will form here a social condition that will maintain the chief glory—the best jewel in her crown—a people of noble impulses, refined ideas and God-fearing. The Virginians and Alabamians, with their warm, generous natures, will unite in marriage with the sons and daughters of Massachusetts and New Hampshire, schooled in self-reliance and intellectual forces, and the people of Florence fifty and one hundred years hence will make a standard of manhood and womanhood the highest type of our civilization yet to be attained. Of course Florence has good schools and several of them. A great Baptist University is to be built here; the foundations are already laid, and that towering, finished orator and splendid preacher, the Reverend Dr. Hawthorne, will devote himself to the endowment of it.

One of the great advantages of Florence as an abiding place is the river, which insures good sewerage, and in the near future that is an important question that all thriving, booming places must face, whether the cost be triflingly small, as at Florence, or very heavy. Navigation and water freights are the police powers of nature over gigantic corporations. A navigable river is to a town or city what a check rein is to a high-strung horse; it aids in preventing railroads from running away with "the bit between their teeth" if so disposed. As to the cost of property, choice business lots can be bought for \$100 to \$125 per front foot; residence lots are to be had for \$10 to \$25 per front foot, this last being for the choicest residence property in the town. The cost of building is very cheap; brick laid cost \$9 per thousand; the best of lumber \$13 per thousand; oak and poplar lumber of best grade can be purchased at \$10 per thousand. There is an abundance of good labor at fair prices; building stone abounds and costs \$4.25 per perch laid.

#### A FIRST-CLASS HOTEL.

The new hotel called the "College" has been finished, and is now ready for business under the management of Messrs. B. L. Boynton & Co. It is a sweet, well-appointed hotel, kept by men who are fully alive to what a good hotel means—the traveler's home, not a stock-pen to drive the public into and cold-bloodedly persecute them. The College Hotel has an innovation in white servants and white girls, from Boston, in the dining-room. I am sure there are hundreds of people who have been waiting the announcement that Florence had a first-class hotel. Well, it is there now.

Another good hotel, "The Sweetwater," is nearly completed, and it will furnish a fine opportunity to some good hotel-keeper who understands how to run a hotel.

The Lauderdale Club is erecting a \$10,000 club house, and in the future visitors to the city and residents can, if they desire, find a cosy place to while the hours away in good company and pleasure.

Florence is evidently a young man's town in every sense of the word.

In conclusion, I wish to say to the home-seeker and investor that, in my judgment, there is not in this broad land a more attractive place, nor one that holds out more inducements, all in all, than Florence. Already the diamond lights of progress and prosperity dot her hills and sparkle in an emerald of umbrageous setting. The steam horse glides through her streets, and that grand, beautiful river will go on forever.

Florence will soon hold the honor of having the largest cotton mill in the South, measured by the number of spindles. The great Eagle & Phoenix Mills (4) at Columbus, Ga., and the Clifton Mills (9) at Clifton, S. C., heretofore the largest in the South, have an aggregate of about 46,000 and 49,000 spindles respectively, while the new mill now under construction here by the Florence Manufacturing Co. will have at the start 53,500 spindles in one mill. The machinery for this mill is now under contract, and it is expected that the entire plant will be completed by about July 1st next. The magnitude of this enterprise is so great that comment would be superfluous. Suffice it to say that in every detail it will be one of the most perfect cotton mills in America. PERCY CLARK.

# The NORTH CAROLINA STEEL AND IRON COMPANY, WORKS--GREENSBORO, N. C.

## Iron Mines---Chatham, Moore and Madison Counties, N. C.

This company starts out with the most flattering prospects of any company in the South. It has been organized for the manufacture of Bessemer Pig Iron and Steel. It owns large bodies of high-grade Bessemer, Mill and Foundry Iron Ores, and has enough **Ore in sight to supply 1,000 tons a day for fifty years.**

Coke will be brought from Eastern Kentucky by the Western North Carolina Railroad, or from Virginia by the Norfolk & Western and the Cape Fear & Yadkin Valley, which two roads will within a year connect at Mt. Airy.

The company has secured the famous "Ore Hill" and other iron ore lands amounting to some 2,000 acres in Chatham and Moore counties, N. C., on the line of the Cape Fear & Yadkin Valley Railroad, 40 miles from Greensboro; other magnetic iron ore lands in Western North Carolina, ample limestone 35 miles from Greensboro, on line of Cape Fear & Yadkin Valley Railroad, besides other franchises and about 2,000 acres of land in and around the City of Greensboro, which is to be laid off in Streets, Building Lots, Manufacturing Sites and Parks.

The company will at once proceed to erect at Greensboro a 150-ton daily capacity iron furnace plant for the manufacture of Bessemer pig iron, to be followed by others, with a steel plant and rolling mills for making steel rails; these plants to be at Greensboro. The company will foster and encourage all kinds of industries, and will make Greensboro a large manufacturing city, because, situated as it is, with its railroad connections, making it accessible to large bodies of the best kind of Bessemer ores, lime-

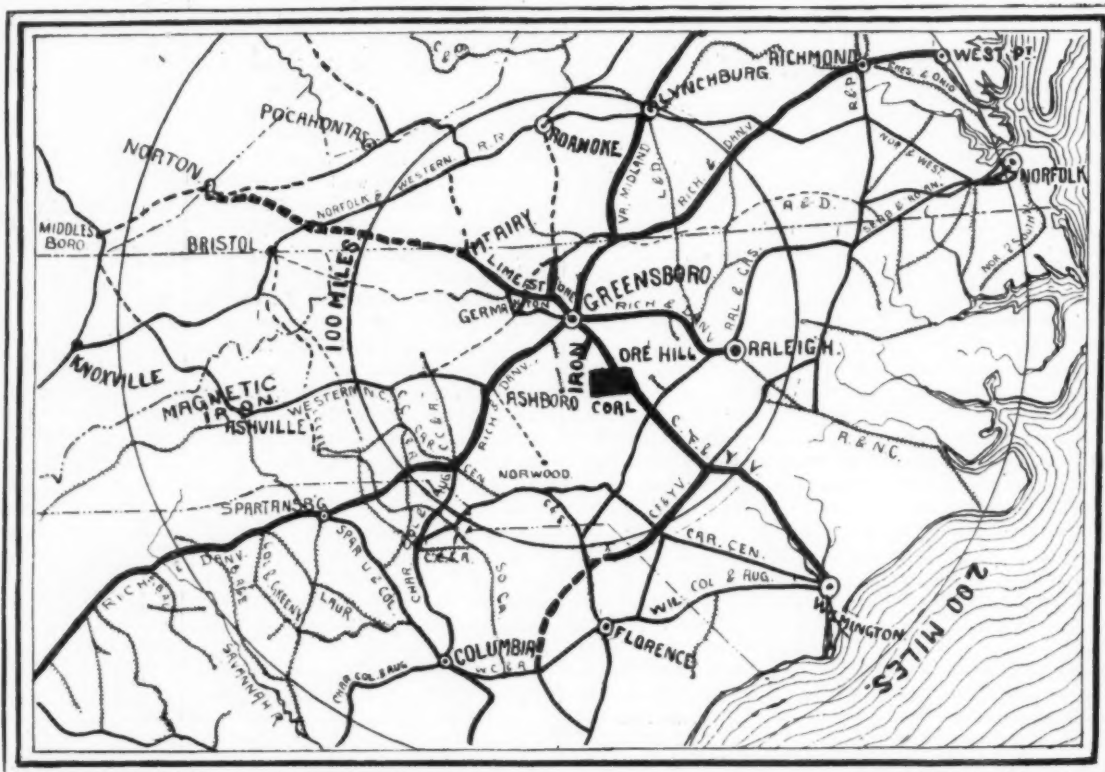
stone and coke, it is estimated that Bessemer pig can be made here at \$8 per ton. Iron has been made from these "Ore Hill" ores ever since before the Revolutionary war. Over 25,000 tons of charcoal pig have been made from these ores.

The Confederate government appropriated several millions of dollars towards making these iron ores available for war purposes, and the work on them was only stopped by the close of the war. The ores consist of brown hematites that average 56 per cent., red hematites that average over 60 per cent., and magnetites that average about 60 per cent., all of which are practically free from phosphorus and are low in silica, besides the famous black band ores.

The average run of pig made at the "Ore Hill" furnace in April, 1865, was 63 per cent., which shows what the ores will do.

These properties have been favorably reported on by such men as Prof. Emmons, Commodore Wilkes, Prof. Gent, Prof. Shaffer, Prof. Kerr, Prof. Wilber, George G. Francis, M. E., S. A. Richards, Smith Newman, Thos. P. Williams and many others, and from working an analyses of the ores show them to be in large bodies and high grade pure ores, from which to make high grade pig metal and steel.

This much for the ores. This company is located at the prosperous City of Greensboro, with all its various advantages, and is backed by the fostering care of the Richmond & Danville and the Cape Fear & Yadkin Valley Railroads, and officered by men of thorough business experience.



MAP SHOWING THE LOCATION OF GREENSBORO AND ITS RELATIVE POSITION AS TO ORES, COKE, LIMESTONE, RAILROAD AND WATER TRANSPORTATION.

### Analyses of the Ores.

	BROWN ORES.		RED ORES.		MAGNETIC ORES.	
Metallic Iron.....	57.41%	58.67%	67.48%	68.74%	56.00%	64.00%
Phosphorus.....	none.	none.	none.	none.	none.	none.
Silica.....	1.42	3.79	2.10	1.40	4.25	3.10
Sulphur.....	none.	0.44	trace.	trace.	none.	none.
Titanium.....	.....	.....	.....	.....	none.	none.

### Cost of Making Bessemer Pig Iron at Greensboro, N. C.

Mining 1 4-10 tons 60% ore at 50 cts. per ton.....	\$ .70
Freight 1 4-10 tons 60% ore, 40 miles, at 7½ mills per mile.....	.42
Coke, 1¼ tons, at \$1.65—Pocahontas.....	2.07
Freight 1¼ tons coke, 245 miles, at ½c. per ton per mile.....	1.53
Limestone.....	.25
Labor \$1.00. Maintenance 50c.....	1.50
Repairs 50c. Interest 50c. Salaries 50c.....	1.50
Total cost ton of pig iron.....	\$7.97

Bessemer pig iron can be made here at these figures (\$7.97 a ton) and there is no other place in America where it can be produced at a lower cost; but even if calculations be based on a cost of \$10 a ton, the profits would be more than satisfactory, whether the iron be shipped North or be manufactured into steel rails here, as is intended.

Besides this, "The North Carolina Steel and Iron Co." own about 2,000 acres of land in Greensboro, that they will lay off into Streets, Lots, Manufacturing Sites and Parks. This land was secured at very low figures, and inside of a year it will be worth more than the entire capital stock of the company, without any real estate booming.

GREENSBORO is now a prosperous town of 7,000 inhabitants, and has all modern improvements and many manufacturing enterprises.

## The North Carolina Steel and Iron Co.

OFFERS A PART OF ITS

**\$1,000,000 Capital Stock at Par.**

### BOOKS OF SUBSCRIPTION ARE OPEN AT

Davis & Wiley Bank, Salisbury, N. C.

The National Bank of Greensboro, Greensboro, N. C.

### OFFICERS.

President,	JAMES A. ODELL.
Vice-President and General Manager,	J. J. NEWMAN.
Secretary and Treasurer,	SAM'L H. WILEY.
Attorney,	THEO. F. KLUTTZ.

### Executive Committee.

J. A. ODELL.	A. B. ANDREWS.	J. A. GRAY.
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### DIRECTORS.

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JAMES A. ODELL, President Odell Hardware Co., Greensboro, N. C.  
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SAM'L H. WILEY, President Davis & Wiley Bank, Salisbury, N. C.  
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SEND FOR PROSPECTUS.



# MIDDLESBOROUGH,

✱ ..... **KENTUCKY.** ..... ✱

"The Wonder of the Age in Town Building."

The Future Iron ~~and~~ Steel Center of America.

THE PASSAGEWAY FOR RAILROADS BETWEEN THE WEST AND THE EAST.

A SOURCE OF COKE SUPPLY FOR THE SOUTH AND WEST.

THERE ARE NOW UNDER CONTRACT:

A Basic Steel and Iron Plant, daily capacity 300 tons, to cost \$1,000,000 and to employ about 1,000 hands.

An Iron Rod Mill; A Sheet Mill; A Nail Mill.

Two Coke Iron Furnaces, 150 tons daily capacity each, and one Charcoal Furnace.

A \$500,000 Tannery — the largest in the world.

Fourteen Coal Mining Enterprises, to employ about \$2,000,000 capital.

A Dozen Wood-Working Enterprises.

A Twelve-Mile Belt Railroad

Tile Works, Fire and Building Brick Works, and a dozen or more other enterprises.

**\$14,900,000**

Already Invested in the Development of Middlesborough.

Other New Industries are Being rapidly added to those already in operation and contracted for.

## COAL, IRON, TIMBER

AND OTHER RAW MATERIALS.

DELIGHTFUL AND HEALTHFUL MOUNTAIN CLIMATE,

WHERE MALARIA AND THROAT AND LUNG TROUBLES ARE UNKNOWN.

Elevation from 1,300 to 2,400 feet above the Sea Level.

SURROUNDED BY VALLEYS OF RICH AND PRODUCTIVE FARM LANDS.

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**MIDDLESBOROUGH TOWN COMPANY,**  
MIDDLESBOROUGH, KY.

Ex-Mayor ABRAM S. HEWITT, of New York, says this section of Alabama "is the only place upon the North American Continent where it is possible to make iron in competition with the cheap iron of England."

## BUSINESS POINTS

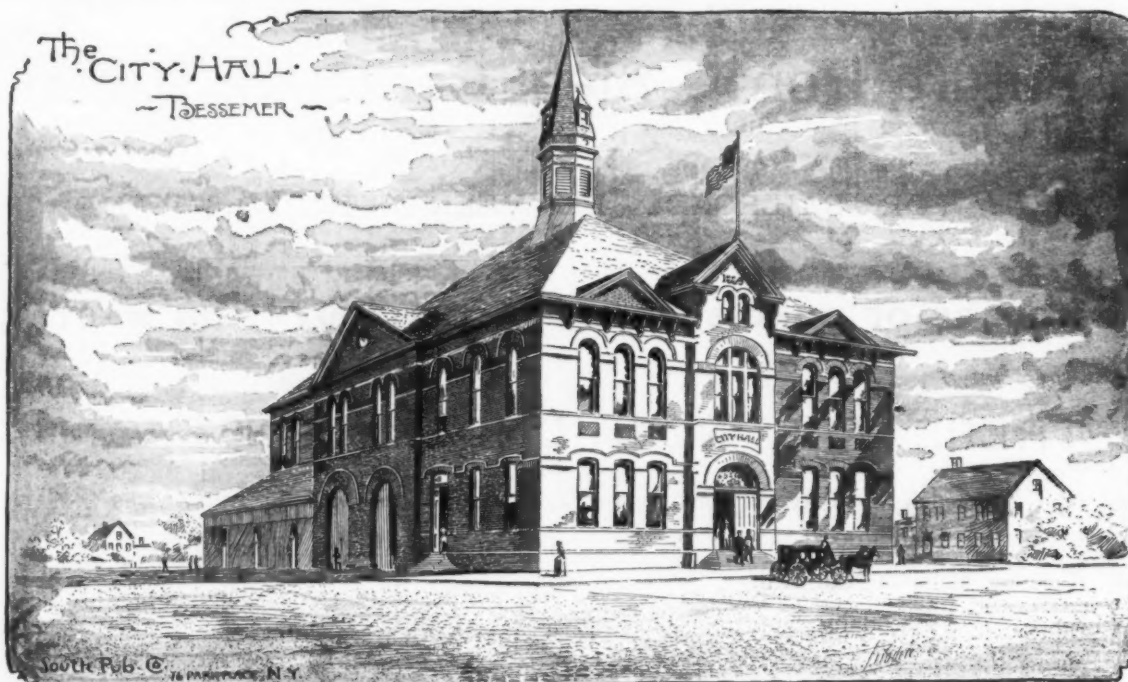
ABOUT

# BESSEMER CITY, ALA.

WORTH CONSIDERING BY BUSINESS MEN.

### COTTON MANUFACTURING.

With the Cotton growing near the mill; at the present cost of spindles in position; spacious sites costing nothing; coal delivered to mills at \$1.25 per ton; modern steam machinery with its minimum consumption of fuel, Bessemer offers marked advantages.



**100 Fruit, Truck and Dairy Farms.**  
The Land Company offers on leases for five or ten years, with very liberal terms, One Hundred Farms, 5, 10 and 15 Acres each, and will erect cottages and put up fencing; but only to parties who have, by experience, been successful in these branches of business. Don't want any inexperienced experimenters on any terms.

## Bessemer's Iron Foundations.

**First.—The DeBardeleben Coal & Iron Company**—Two furnaces in blast; two batteries of 170 coke ovens each—340. Extensive coal and iron mines, limestone rock, etc., in active operation. Furnaces situated within the city limits, occupying 160 acres of land—enough for multiplied extensions. Average output 225 tons daily.

**Second.—The Bessemer Steel & Iron Company**—Two furnaces go in blast December, 1889; two batteries of 200 coke ovens each. Extensive coal and iron mines, limestone rock, etc., in active operation. Furnaces situated within the city limits, occupying 100 acres of land—enough for multiplied extensions. Average output 225 tons daily.

**Third.—The Little Belle Iron Company**—To go in blast December, 1889. One charcoal furnace, situated within the city limits, occupying 50 acres of land, enough for multiplied extensions. Average output 60 tons daily.

**Fourth.—The Bessemer Rolling Mills**—Situated within the city limits, occupying 13 acres of land. When running full works 700 hands. One hundred tons possible daily output.

**Fifth.**—In addition to the coal and iron mines above referred to, in connection with the five furnaces, these proprietors own the **MAGNETIC ORE LAND COMPANY**. The total coal, iron and limestone lands owned by these corporations amount to over

**200,000 ACRES.**

The **EARLIEST SELECTED** and choicest lands in Alabama, all directly tributary to the City of Bessemer, representing, with furnaces, rolling mills, etc., an aggregate of \$8,000,000, not including other lines of business.

Iron Manufacturers in Bessemer will have a direct advantage of \$2.50 to \$3 per ton on the cost of Pig Iron, compared with Pennsylvania Prices.

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The Louisville & Nashville Lines.

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The Birmingham & Bessemer Railroad runs trains every hour to Birmingham.

The Bessemer & Huntsville is completed as far as Chepultepec.

The Bessemer & Tuscaloosa is completed to Woodstock, a distance of thirty miles, lacking only eighteen miles of reaching Tuscaloosa.

The Bessemer & Selma has been surveyed and grading will soon commence.

The Mobile & Bessemer, an extension of the East Tennessee, Virginia & Georgia, is in process of rapid construction.

The Sheffield & Bessemer is projected to Bessemer. It is now built as far as Jasper, forty miles northwest.

The Birmingham, Powderly & Bessemer Street Railway, Bessemer to Birmingham, will be running by November 1st, half the line being now graded.

**WOOD-WORKING INDUSTRIES**—The primeval forests of Alabama, tributary to Bessemer, offer manifold attractions to Wood-Working Manufacturers.

**CORRESPONDENCE SOLICITED.** For particular information as to price of lots, manufacturing sites and inducements to establishing plants in this unrivalled locality, address

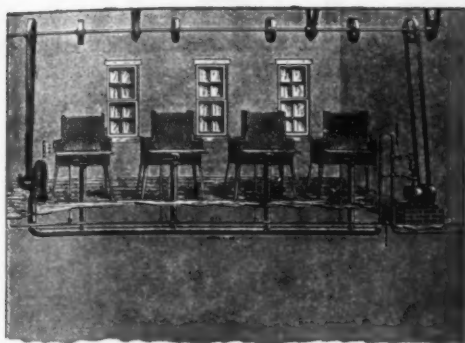
H. M. McNUTT, Secretary.

*H. M. McNutt*  
President



# Standard Oil Fuel Burner Company

Office and Factory, Fort Plain, New York.



[SECTION OF PLANT OF FIFTY FIRES PUT IN FOR THE LAMSON & SESSIONS CO., CLEVELAND, OHIO.]

This Burner is particularly adapted to the heavy work done by axe and scythe makers, large drop forging, etc., as well as the innumerable lighter manufactures.

We have in actual use fires from 6 x 8 inches for sure work, up to 5 x 24 feet for heating Blooms, where we heat 60 gross tons per day.

In fact it can be applied to any purpose where heat is required, obtained from coal or gas. We save in fuel, labor, time, quality of work, health of operatives, cleanliness; also in the durability of belting, which is rapidly destroyed by the fumes of gas produced by anthracite coal.

We have at this office a number of testimonials from large concerns, setting forth the merits as claimed, which are open to inspection, or a circular will be furnished on application. For further information apply at the offices of the company, Ft Plain, N.Y.

**THE SYSTEM** adopted by this company for the use of Crude Petroleum as fuel is both simple, economical and effective. Perfect combustion, uniform heat, regulated as easily as an ordinary lamp. Although comparatively new, being only introduced in April of this year, the number of fires using it AMOUNT TO NEAR ONE THOUSAND, WHICH IS PROBABLY MORE THAN ALL THE OTHER DEVICES FOR THIS PURPOSE COMBINED.

This company has yet to meet with the first failure in its appliance. The company is ready to put up any number of fires on trial, and to remove the same free of all expense should it fail to do what is represented.

We use the ordinary blast-blower (found in most every establishment) that will give 5 to 6 oz. pressure. Steam or compressed air dispensed with.

This Method is well adapted for Desulphurizing Ores and other Mining Purposes.

OFFICE OF LAKE ERIE IRON CO.,  
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Yours very truly,  
LAKE ERIE IRON CO., G. W. SCOFIELD, Treas.

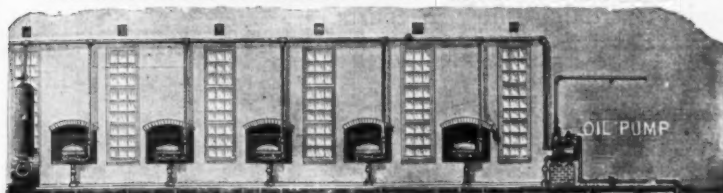
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<b>CENTRAL Stations.</b>	<p>Models of Engineering Skill.          Handsome Investments.          Perfect satisfaction to consumers.          Power sold in any amount cheaper than steam power.          Current for Storage Batteries, Electro plating, etc.          Current to replace all Chemical Batteries.          Current for operating Electric Railways.          Absolute safety to life.          Hundreds of Stations in towns from 2,000 population to largest cities.          Perfect, Simple and Cheap Meters for sale, of light or current, for any use.          Only perfect underground system.          Underground Systems in use since 1882, and perfectly reliable.          Fundamental Patents—absolutely controlling—now in courts.</p>
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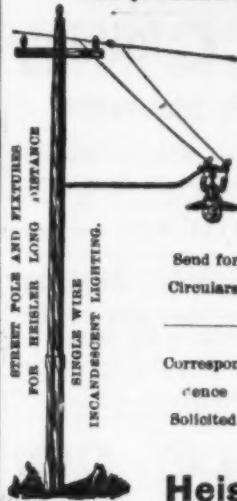
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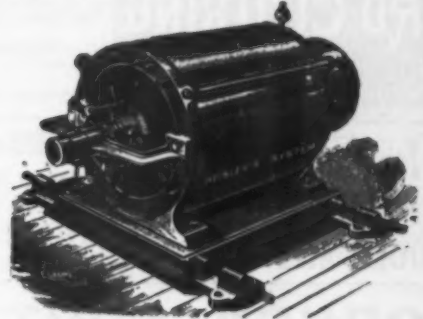
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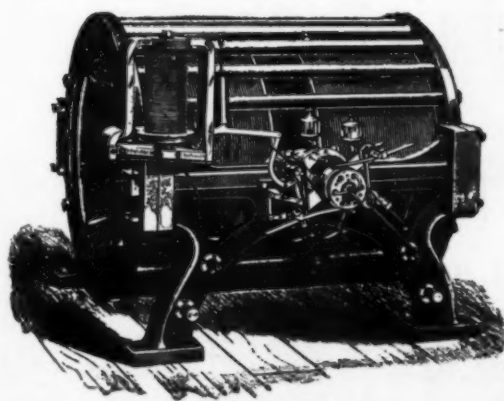
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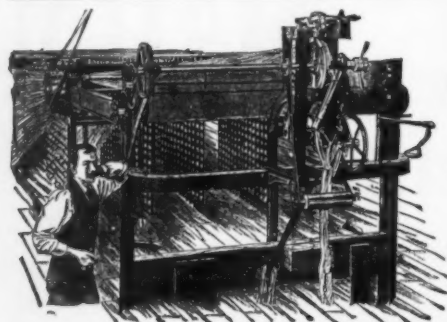
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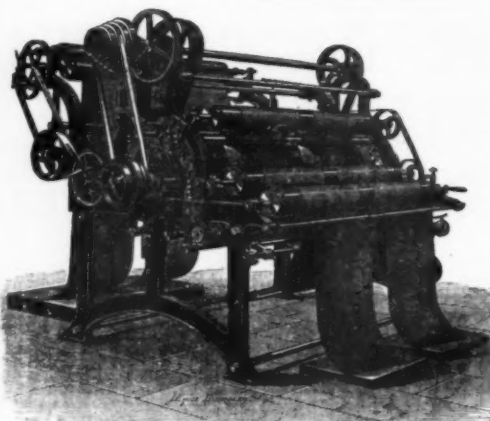
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**Universal Raising or Napping Machine**  
 FOR ALL KINDS OF COTTON OR WOOLEN FABRICS.



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One of these Patent Raising Machines will do the work of six Card-Raising Machines of any other patentee, or eight Teazle Gigs, and by means of the differential motion raises, **WITH ONE AND THE SAME CARD AND WITH EQUAL FACILITY, the**

**HEAVIEST as well as the LIGHTEST and SOFTEST Fabrics.** The Machine raises goods either dry or wet, and also after bleaching; it is equally well adapted for backing as for face goods; it raises equally well the thinnest Shirting as the heaviest Cloth.

It is patented all over Europe and in the United States of America, and is now in use for raising:

**COTTONS:** Shirtings, Calicoes, Twills, Imperials, Lambskins, Velvets, Cords, Moleskins, Fustians, Flannelettes, Trouserings, Blankets, Quiltings, Dometts.

**MIXED GOODS:** Angola Flannels, Blankets, Rugs, Winseys, Unions, Shawls.

**WOOLENS:** Flannels, Beavers, Blankets, Shirtings and Fine Dress Goods.

The Machine takes very little power, a 3-inch strap will drive it under any circumstances. As everything on it is self-acting, it does not require an experienced man to work it.

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 COTTON, WOOLEN, SILK,  
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FOR COTTON WARPS AND PIECE GOODS.

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Possesses more than Double the Capacity of other Water Wheels of same diameter, and has produced the Best Results on Record, as shown in the Following Tests at Holyoke Testing Flume:

Size of Wheel.	Head in Ft.	Horse Power.	Per Cent. Useful Effect.
15-inch.	18.00	30.17	.9000
17 1/4-inch.	17.90	36.35	.9000
20-inch.	18.21	44.00	.9000
25-inch.	17.90	68.65	.9004
30-inch.	11.95	122.54	.9079

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Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably recommend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material.

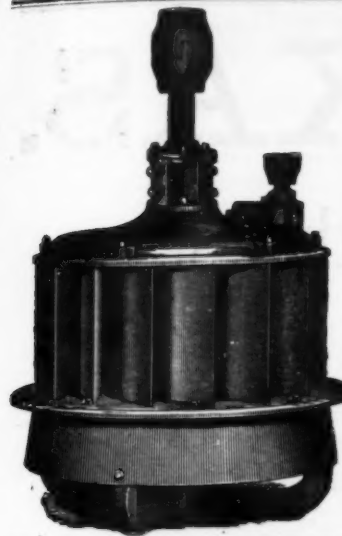
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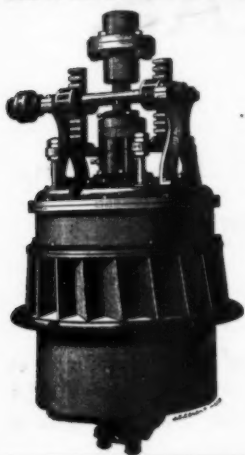
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Used in many of the largest Manufacturing Establishments in the United States. 6,000 horse-power furnished one mill, 7,000 to another, 2,000 in one cotton mill, and one manufacturer 69 wheels. All now running.

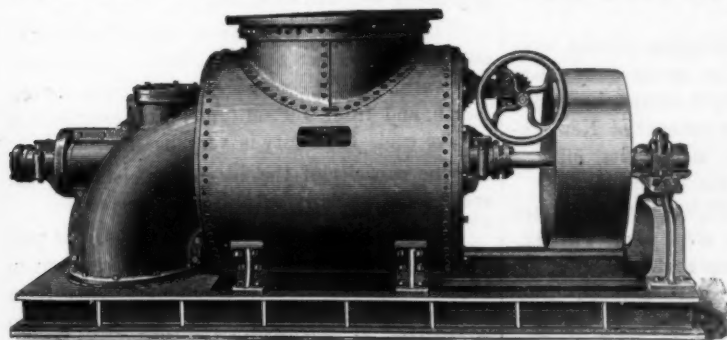
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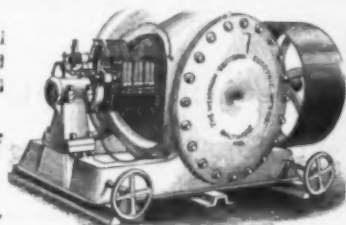
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TIRE UPSETTERS, BENDERS, HAND PUNCHES, TACKLE BLOCKS, ANVILS AND VISES, Etc.  
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For Residences, Factories and Central Stations. Absolutely Safe. No Danger to Life or Property. Simple, Compact and Durable.



We guarantee that it will give 25 per cent. more light per horse-power, whilst the speed required is only about one-half of that of any other system. It is economical in price and is the only Dynamo manufactured in the South.

Agents Wanted for Unoccupied Territory.

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Pipe Cutting and Threading Machine.

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# DENISON, TEXAS.

The "Yankee" City of the Southwest,

— AND —

✱ GATEWAY ✱

— TO THE —

## GREAT STATE OF TEXAS.

The City of Denison presents the Finest Opportunity of any City in the Southwest for the Investment of Capital in Large or Small Sums.

**D**ENISON is situated in Northeastern Texas near inexhaustible beds of coal and iron, surrounded by the finest fruit lands in the world, and adjoining the INDIAN TERRITORY, which, in the nature of things, must in a few years be opened to settlement.

The growth of Denison has been a natural one, the city having reached its present size—16,800 population—in sixteen years.

The city is regularly and beautifully laid out. Railroads run from it in four different directions. The Missouri, Kansas & Texas alone does an enormous business, having 54 miles of switch track in Denison, employing 500 skilled workmen and disbursing \$150,000 a month in wages.

The first public school in the State was established here, and the city's elegant two and three story brick school buildings, surrounded by attractive grounds, are well arranged for the use of the white and colored children. Its schools are in session ten months in each year.

We have sixteen church societies, seven of which are colored.

The city is well supplied with pure water from its numerous private wells—dug in the ground—and its first-class system of water works, giving the citizens ample protection against serious loss by fire, and enabling the insurance companies to rate the city first class as to fire hazard. Rate of taxation low.

The city has four miles of street railway, with six miles now building to be operated by steam motor; has two electric light companies and a telephone plant. It has an influential New England colony, and counts among its citizens people from every State in the Union.

A large hotel, to cost \$125,000, is to be erected here this year, and a large steel plant with \$2,000,000 of capital is contemplated.

30,000 bales of cotton were shipped from Denison in 1888. 200,000 baskets of strawberries and several carloads of peaches and other fruits have been shipped to market this season.

The Denison Canning Co., capitalized at \$100,000, has just been organized, and ground has been broken for a large fruit and vegetable canning factory.

A cotton mill company is being formed with a capital of \$500,000. Denison citizens have subscribed \$150,000 to this enterprise; Eastern capitalists will add \$350,000.

The climate of Denison is magnificent, situated nearly 800 feet above sea level. In summer it is warm, but far cooler than many cities farther North, and from 6 P. M. until after sunrise it is always cool. The city is very healthy.

The capacity of the ice factory is being increased from a daily output of 15 tons to 30.

The Denison Land & Investment Co. is prepared to give every reasonable encouragement to manufacturers, and solicit correspondence from such manufacturers as contemplate coming into the Southwest to locate.

Address all communications to

## THE DENISON LAND & INVESTMENT COMPANY, DENISON, TEXAS.

Paid-Up Capital, - - - - - \$1,200,000.

### OFFICERS:

W. P. RICE, President.

MILTON H. FRENCH, Vice-President and General Manager.

ARTHUR L. BERRY, Secretary and Treasurer.

### DIRECTORS:

W. P. RICE, Kansas City, Mo.  
J. M. FORD, Kansas City, Mo.  
A. R. COLLINS, Denison, Tex.

B. J. DERBY, Burlington, Vermont.  
PAUL LANG, Oxford, N. H.  
M. V. B. CHASE, Augusta, Maine.

MILTON H. FRENCH, Thomaston, Maine.  
A. H. COFFIN, Denison, Texas.  
JOS. B. LINCOLN, Boston, Mass.



## GATEWAY OF THE SOUTHWEST

## DENISON AND ITS BRIGHT PROSPECTS.

Iron, Coal, Timber, Cotton and Grains  
Tributary to Denison

[Spec. correspond'ce MANUFACTURERS' RECORD.]

DENISON, TEXAS, Dec. 14, 1889.

The regular readers of the MANUFACTURERS' RECORD are by this time aware of the fact that the great Southwest in general, and Denison in particular, are sharing largely in the wonderful industrial development of the Southern States. Doubtless this special issue will be read by many who would be profited by a brief presentation of the advantages and resources of this thriving young city, which from its geographical position, is fitly styled the "Gateway of the Southwest." The growth of Texas, as exhibited in the last census, was a surprise to the rest of the country, but the progress of the State during the decade just about to close, will prove a revelation. Texas is of right, and soon will exhibit herself as the "Empire State" of the Union. Within her broad confines the entire population of France or Germany could be supported without being crowded. The State's attractions for the farmer and the grazier have long been recognized, and it has been mainly in these fields that her greatest advances since the war have been made. But the industrial "boom" is "on" in the Lone Star State, and the leading cities of Texas are growing at a rapid pace and exhibiting a spirit of enterprise worthy of the most progressive communities in the entire Union. Although one of the youngest of the leading cities in the State, Denison yields to none of them in enterprise, and is just now the most attractive field in the entire commonwealth for the investor who is prompt to seize the opportunities for profit here presented.

Situated in Northeast Texas, on the very border of Indian Territory, Denison is the veritable gateway from the east and central west to Texas and Old Mexico. Seventeen years ago the site of the city was a surveyor's camp. To-day Denison contains a population of 17,000, supplied with all the requisites of modern city life and with opportunities nowhere excelled west of the Mississippi. The city is the county seat of Grayson, one of the richest and most populous counties in Texas. It is admirably laid out with wide streets and parallel lanes, broad avenues and roomy sidewalks. The site is 200 feet above the level of red river and 800 feet above that of the Gulf. The climate, winter and summer, is all that could be desired, presenting extremes of neither heat nor cold. Gas and electric lights, a paid fire department, street railways and a motor line, numerous schools, private and free, nine churches, several banks, substantial business structures and well-supplied markets impress the visitor with the public spirit of the citizens and cause him to set Denison down as a live and pushing place. As for railroad facilities the Missouri, Kansas & Texas, Houston & Texas Central, Denison & South-eastern, Gainesville, Henrietta & Western and New Orleans & Bonham railways center here—roads which traverse rich cotton, fruit and grain-growing, timber, coal, iron and grazing regions. The St. Louis & San Francisco, Texas Pacific, Santa Fe, Rock Island and other railways must ere long extend their lines to Denison. The city has thrived surprisingly from its very foundation simply as the distributing point for the products and supplies of an unsurpassed agricultural region; but within the past few years the industrial advantages of the place have begun to be improved and there are now established here the largest canning factory in the Southwest, railway

machine shops and repair shops, two marble-working concerns, two machine shops, an ice factory, two steam laundries, bottling works, soap factory, hornware factory, a large cotton gin, three planing mills, an iron foundry, brick yards (one a large steam plant) and the largest cotton compress in Texas. A pulp mill, a carriage factory and a chair factory will also likely soon be established.

Home enterprise has done much for Denison, and this is happily backed, thanks to the Denison Land & Improvement Co., by the sympathy and support of some of the shrewdest capitalists of the East and West. The company, which has a paid-up capital of \$1,200,000, is, for the most part, composed of wealthy New England gentlemen. Its officers are Col. W. P. Rice, president, Col. Milton H. French, vice-president and general manager, and Arthur L. Berry, secretary and treasurer. President Rice and Dr. J. M. Ford, who learned the "true inwardness" of substantial city building in Kansas city and other fields, have brought train after train of splendid Pullmans here within the past few months filled with shrewd and solid capitalists from the East, not one of whom failed to be "impressed with the outlook here for profitable outlays of capital. The happy result of the last excursion, which arrived here on the 3rd instant, is that a cotton mill, to cost half a million dollars, is to be erected in Denison. The stock has all been taken, and the work of construction will soon begin. The mill will contain 25,000 spindles and 750 looms, working up 9,500 bales of cotton annually and turning out 12,000,000 yards of cotton goods per year. The factory will employ 700 hands. Its product will be a variety of goods suited to the home demand, and is expected to be entirely consumed in Texas and the Indian Territory. The work will progress from coarse to finer fabrics as the operatives acquire skill. The main building will be four stories high with basement, 300x100 feet in dimensions, with flat roof, and an L 100x100 feet, one story, to be used as picker room. Another L, two stories high, 52x50 feet, will contain the other departments. The buildings will be of Denison-made brick. The lime will be burned here, and the lumber will come from East Texas. The latest improvements in newly built Eastern mills will be adopted. This mill will, no doubt, be followed by others, as the home market is large and constantly increasing.

Denison expects the early establishment here of steel and iron plants. Within a short distance of the city, in the Indian Territory, are the great Choctaw coal fields, the coal from which for coking purposes is declared by experts to be unsurpassed. To the South and Southwest, easily accessible by rail, are vast beds of hematite iron ore, the immense Llano deposits of the finest Bessemer ores, the former workable for some purposes direct from the furnace and the latter free from sulphur and low in phosphorous and reckoned superior to the best ores of Michigan. Denison need not draw upon these stores, accessible as they are, for within 50 or 60 miles, in the Indian Territory, are heavy deposits of iron ore analyzing 59 per cent. of metallic iron and less than 0.05 phosphorous. These deposits lie within easy reach of the Denison & Washita Valley Railway, already tracked and graded for a considerable distance. The Choctaw Coal & Iron Co. are about to extend their road in the Indian Territory from its junction with the St. Louis & San Francisco to Denison, and the surveyors are by this time in the field. That this section will largely supply its home needs in the way of iron and steel is in the light of the above facts manifest. Denison is nearer to these coking coal beds than any other center of population in the Southwest. Iron, too, is at her doors, and the great Llano fields convenient. But coke makes

the iron center and not the iron ore. Millions of tons of ore from distant States and foreign countries are shipped into Pennsylvania solely because she has the coking coal to work the furnaces. "Coke is King," and in this section the seat of his sovereignty is bound to be Denison. These are simply some cold facts about the environs of Denison which capitalists who want to make big money on fair outlays should only have need to perceive to jostle each other in "getting in on the ground floor." The destiny of Pittsburg was no more assured 25 years ago than is that of Denison today, for Denison is the sealed and selected Pittsburg of the Southwest. It is not likely that the "materializing" of an extensive steel plant here will be long deferred. Indeed, it is "in the air" that such a project is already inchoate. St. Paul, Minn., parties, too, are here prospecting with the view of removing a large merchants' bar-iron plant to this point. There's money in iron, and there's big money in iron, at Denison. The pioneers will reap the most fruitful harvests.

But it is not only the iron and steel interests whose notice Denison seeks to court. Cotton and woolen mills, furniture factories, carriage and wagon works, tanneries, canneries, meat packing and dressed meat establishments, which cold storage and improved ice-making and refrigerating apparatus permit of readily; in short, the wants of a thrifty, growing people, blessed with a fertile soil and a genial clime, await supplying by home or outside enterprise. Denison's gates are wide open, and her people, as cosmopolitan as can be found anywhere, will meet would-be investors in a spirit of mutual fairness. There is little of the "speculative" about Denison folk—certainly not with Col. Rice and his associates in the Land & Improvement Company. They have put their money into Denison primarily for the sake of Denison, for they know that in profiting the city they profit themselves. Such, in brief, is the story of Denison, its creditable realizations and well-founded expectations.

## FLORENCE, S. C.

A Flourishing Railroad Center—  
Steady Rise in Real Estate—  
Need of Increased Banking  
Facilities.

[Spec. correspond'ce MANUFACTURERS' RECORD.]

FLORENCE, S. C., Dec. 11, 1889.

I visited this point last spring, and then spoke of the great advantages it possesses as a location for manufactures. The town is the terminal of four divisions of the Atlantic Coast Line, and is surrounded by a fertile country. The oil mill, of which I spoke in my former letter, is now an accomplished fact, and is working to its fullest capacity. The courthouse and jail were then only commenced; while now I find that the jail has for some time been finished, and the courthouse, which, by the way, is a very fine building, lacks but little of being completed. Several fine residences have been erected in the same interval, and a large amount of real estate has changed hands at greatly increased values, while daily the demand increases and prices are rising with a rapidity like that witnessed in some of the "booming" Alabama towns. Real estate men will not quote prices to-day and guarantee them for to-morrow.

Application has just been made to the legislature to grant a city charter to the town, with greatly enlarged powers vested in the council. Work has commenced on the macadamized road to the National cemetery, for which the money was appropriated by the government last year. A beautiful park has been purchased by the city fathers, and will be improved as a place of resort for the weary Florentines. The Baptist church is to be torn down, and

a large new edifice to be erected at a cost of over \$10,000, and many other moves are on the tapis, which will add much to values and tend to draw capital hitherward.

I stated in my letter last spring that the bank capital of \$25,000 was altogether too small for the needs of the town; since that time it has been doubled, but still the great need of business men is more ready cash, and there is a fine field for profit to those who will invest the money. Cotton is coming to this point far more rapidly than heretofore, and tobacco, that great cash staple, is being planted in greatly increased acreage each year. With these two staples brought to this market in increased volume, probably \$200,000 banking capital could be used with profit.

Those seeking for a profitable and safe investment of surplus cash should come here and judge for themselves.

So far as climate is concerned, that of Florence is nearly perfect during the winter, while in the summer the thermometer rarely registers above 90 degrees. The health of the town is excellent; lying midway between the North and the extreme South, it is most admirably situated. The people of Florence are liberal-minded, whole-souled and hospitable, and are ready to receive such as come among them to make a home with the greatest cordiality. Beyond a doubt, capital can be invested here with little risk and with good prospects for profit, and few towns of its size in the South offer better.

JOHN P. COFFIN.

## A Great Revolution.

The greatest industrial revolution which the world has ever seen has begun. This country has entered upon an era in which changes, fraught with tremendous consequences, are to occur. The center of industrial life is to be transferred from New England and Pennsylvania to the South. The controlling forces in all lines of manufacturing are gathering in the South, and not only will this section dominate these interests in America, but it is the South which will yet meet Great Britain itself in the final struggle for the mastery of the world's iron and cotton industries, and the South will win. No business man, whether interested directly in the South or not, can afford to ignore these facts. He must watch the course of events, and study these new movements, else he will find his more enterprising competitors pushing ahead of him. No one can keep thoroughly posted on these matters without reading the MANUFACTURERS' RECORD, of Baltimore. It is the exponent of this revolution and is "the most widely quoted industrial paper in the world." It is the most active, pushing, industrial paper in the country, and no business man can afford not to read it. The subscription price is \$4 a year. It is not merely a mechanical or technical paper, but a journal of universal interest to progressive business men of all sections. Why not subscribe?

ARE you a Southern banker? If so, can you afford not to subscribe to the MANUFACTURERS' RECORD, the recognized exponent of the financial, industrial and railroad interests of the South.

## MONEY TO BE MADE.

### A Pointer to Investors Concerning the Stock of the Florence Land, Mining and Manufacturing Company.

One of the Probable Effects of the Recent Heavy Investments Made by Philadelphia Capitalists at Florence.

#### IMMENSELY VALUABLE ASSETS.

[Spec. correspondence MANUFACTURERS' RECORD.] FLORENCE, ALA., December 7, 1889.

The recent heavy local buying of the stock of the Florence Land, Mining & Manufacturing Company, known here as "the old company," has led me to make some investigations that may prove of considerable interest to those readers of the MANUFACTURERS' RECORD who are looking for stocks based on valuable and absolutely unshrinkable assets.

This company has no treasury stock for sale, every certificate of the three millions authorized having been sold long ago, and so I am not favoring the company but the investment seeker in speaking of the value of this stock and the rare money-making opportunity which it offers.

Some of the largest fortunes in the world have been made out of stocks concerning whose basis the great investing public had remained uninformed until after heavy holdings had been acquired by men of recognized financial judgment. Indeed it is generally not till then that the aforesaid general public take hold. For instance, it is safe to say that since certain notable Philadelphia capitalists have acquired nearly every dollar of the stock of the Cotton & Iron Co. here, that it will soon be in great demand and go away above par. And it is probably likewise within the limits of conservatism to predict that this immense Quaker City interest at Florence will lead to inquiry concerning the stocks of some of the other companies domiciled at this point, and result in large takings not only at Philadelphia but at other centers of capital. Indeed, the purchase this very week of a large block of Florence Investment Co.'s stock by the New England party who were here, was doubtless due in great measure to the confidence in Florence manifested by the Philadelphians. Another stock that will soon attract Northern attention is that of the Railroad & Improvement Co., concerning which a special article has already appeared in these columns.

One of the excellent features of the particular stock (Florence Land, Mining & Manufacturing Co.) which I now desire to emphasize the advantages of to investors, and to men who want to make some money almost like finding it, lies in a scheme for reducing the capitalization, which, while not materially reducing the assets, promises to effect within a short time the cancellation of shares enough to reduce the capitalization one-third or one-half. Indeed it is possible that this scheme instead of impairing the value of the assets of the company will result in its enhancement. I refer to the plan of taking payment of deferred notes in stock of the company, which is forthwith destroyed. Let us suppose that only one-fourth of the purchasers of building lots improve them. The result is, not only the addition of the first payment to the cash in the company's treasury, but the natural enhancement of the value of its properties by the improvements made by purchasers. A sale of \$600,000 worth of property under this arrangement would put into the treasury \$200,000 in cash, and cancel \$1,000,000 of the capital stock at the present rate allowed for shares taken for deferred payments. And so, while many companies are watering stock, this company is rapidly reducing its capitalization.

Again this stock is a dividend payer.

Having no debts whatever (except \$4,000 due a guardian or trustee who prefers to leave the money where it is to re-invest) the company has inaugurated a policy of paying dividends and there is to-day enough cash on hand and in sight to pay what is equivalent to 4 per cent. on the present price of the stock for the next four years.

This stock was originally marketed several years ago at 13½ cents on the dollar, the then estimated value of its assets being only \$400,000. To-day its assets are worth under the most conservative valuation at least seven times that amount. In this time the market price has gone from 13½ to 25, but in order to keep pace with the assets it ought to be at least seven times 13½ instead of only 25.

As has been said the people of this locality who know the assets have recently been buying this stock with eagerness. Outsiders would buy it even more eagerly if they knew the facts about Florence and the facts about the assets of this company. To those not acquainted with Florence, I commend Mr. Percy Clark's article on the place in this number of the MANUFACTURERS' RECORD, and for the benefit of those who are not acquainted with the assets of the Florence Land, Mining and Manufacturing Co. I will append a statement taken from the third annual report for the year ending Nov. 31, 1889:

#### ASSETS OF THE FLORENCE LAND, MINING AND MANUFACTURING COMPANY.

4,260 town lots, at \$375...	\$1,597,500 00
655½ acres land adjoining, at \$300 .....	196,725 00
30 lots and buildings and hotel buildings.....	85,000 00
25,000 acres of ore and timber land in Wayne County, Tenn. (on line of Florence Northern Railroad), at \$25.....	625,000 00
Land notes secured by first mortgage, due 1888.....	5,300 00
Land notes secured by first mortgage, due 1889.....	24,816 89
Land notes secured by first mortgage, due 1890.....	58,855 26
Land notes secured by first mortgage, due 1891.....	50,595 24
Land notes secured by first mortgage, due 1892.....	27,515 75
Loan to Florence Store Co. first mortgage, due 1893.....	5,000 00
Note of Cotton and Iron Co., due 1890 .....	22,370 00
Interest accrued on notes First mortgage bonds of Florence Northern Railroad.....	50,000 00
Stock of Florence Stove and Ware Co.....	5,000 00
Stock of Florence Compress Co.....	5,000 00
Stock of College Hotel Co.....	3,000 00
Stock of Sweetwater Hotel Co.....	3,500 00
Stock of Florence Electric Light and Power Co.....	500 00
Stock of Florence Publishing Co.....	500 00
Cash in bank.....	13,929 20
Treasury stock Florence Land, Mining & Manufacturing Co. (325 shares) .....	6,500 00
	<b>\$2,803,016 56</b>

#### LIABILITIES.

Capital stock.....	\$3,000,000 00
Less stock canceled and retired .....	87,947 00
Total .....	<b>\$2,912,053 00</b>
Note for land, due January 17, 1890 .....	3,500 00
Dividend unpaid (not called for).....	556 00
	<b>\$2,916,109 00</b>

#### ADDITIONAL ASSETS—VALUE UNKNOWN.

Stock of Nashville, Florence & Sheffield Railroad .....	\$ 50,000 00
Stock of Florence Northern Railroad .....	25,000 00
Florence Educational, Land & Development Co.....	289,200 00
	<b>\$ 364,200 00</b>

As has been said the company is not a seller but a buyer of stock, and I don't know where any of it may be had, but I believe the man who gets it at 25 cents will be able to sell for 75 cents before the first of July—in other words soon after the great United States Government works at Muscle Shoals have made the Tennessee river the most safely navigable of the Mississippi's tributaries.

THOMAS P. GRASTY.

**If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4.00 a year.**

## A VOICE FROM KANSAS CITY.

### Predicting a Great Influx into the South of Western Men and Money.

#### A Suggestion to Southern Town Managers.

##### An Advocate of Booms.

KANSAS CITY, MO., Nov. 28, 1889.

Editor Manufacturers' Record:

For some months past a great deal of interest has been taken by Kansas City capitalists in Southern towns. So much money has been made here in real estate that it is hard for many of our people to persuade themselves that there is any other way to make money so easy, and as everything has been run up to the top notch in every Western town of promise, the longing eye naturally turns Southward, where, except at Birmingham, there has never yet been any boom. A number of *avant couriers* have already visited Fort Payne and Florence, in Alabama, and Denison, in Texas. Their reports have had a very bullish effect on Southern city investments.

In view of the advantages enjoyed by the South over what the West now has to offer, it is only a question of realizing what solid foundations most of your new Southern cities are being built upon, to induce thousands of people from this and neighboring cities to make a rush for a slice or two of the tempting pie. And so soon as the West marches on the South, then look out for booms.

Your Eastern man is a veritable treasure as a foundation layer, as a paver of the way, but it takes the Westerner to bring on the boom and make property jump. The former brings factories, the latter brings population and prosperity.

"But," some of your Southern town managers may say, "we don't want any booms. We don't believe in booms. We want a steady, healthy growth." Rats! There is no such thing as a steady, healthy growth. The condition which it is the fad of old fogies to call "steady and healthy" is a condition of stagnation. Whenever you hear a man telling about the steady and healthy growth of a town be careful, as you dread a pauper's grave, not to put a dollar into it. Booms and booms alone are healthy when the growth of a new town is at stake. There never was a town hurt by a boom, and there never was a boom that didn't help the town that got it. Kansas City got on its first legs through a boom. It took its first forward step on a boom. It grew strong and lusty on booms, and today it owes its established pre-eminence to the succession of booms that have made it a rival of St. Louis and Chicago. Look at Birmingham. It has doubled its population, its trade, its industries since its big boom collapsed, and if it can only manage to get up another next spring, within two years more it will have a hundred thousand people.

The fact is these fellows who assert their opposition to booms are either fools or fibbers—most probably the latter. At heart, the chances are they are deeply yearning for a boom, and so I venture a suggestion. The weather prophets, the corn shucks and the goose bones say it is going to be awfully cold this winter in North Missouri, Kansas and Nebraska, and it will take no great amount of persuasion to induce a half dozen train loads of men with a little money in their pockets to come to the Sunny South for a week or two. Let one of your best towns, Fort Payne, for instance, concerning which there has already been a good deal of talk hereabout, induce the Kansas City & Birmingham line to make on every Monday for a couple of months a low round-trip rate, with tickets good going only on, say Monday's trains,

but good returning on any train within 30 days. If the rate be made low enough it will keep the town to which it may be made full of Northwestern men all winter, and so soon as they have got deeds for a goodly spread of lots at present low rates, they will manage somehow or other to concoct a boom that will stir the continent from center to circumference. If Fort Payne don't want to work this scheme, let Florence or some other place of genuine merit try it on.

It is only a question of time, as I said a while ago, when the Northwest will move upon those points where coal, iron ore, timber and other raw materials are in juxtaposition, but what is the use of making the time so long? A little enterprise will start the movement, and the town that makes the first catch will be likely to capture the entire crowd. Why have I written this letter? Because I am a Southerner by birth, and I long to see the South blossom like a magnolia tree in May.

J. M. B.

#### The South's Future.

No one can study the condition of affairs in the South to-day without being amazed at the prospects for the future. No language can adequately describe the possibilities of this section, nor exaggerate the wonderful period of prosperity which it has entered upon. With the largest crops ever produced for three successive years, 1887 exceeding in corn and cotton the highest yield ever made up to that time, 1888 surpassing 1887, and 1889 reaching to still higher figures, and all bringing good prices, the South would be considered wonderfully favored if these big crops alone were all the blessings which had been recently given to it. But to these are to be added the greatest industrial development which the world has ever seen, furnishing profitable employment for every man who wants to work; the building of railroads, nearly one-half of all the new mileage constructed in the whole country since the first of the year having been in the South; the heavy traffic now yielding large profits to Southern roads; the marked advance in iron making a very profitable market for every ton of iron which Southern furnaces can produce; these are some few of the blessings which the South now enjoys. And they come at a time when the whole world is making a great advance movement; when the development of South American trade, the construction of the Nicaraguan canal, the certainty of increased shipbuilding interests in this country, all find the South just ready to secure the greatest share of all the benefits that must arise from this remarkable combination of circumstances.

The MANUFACTURERS' RECORD has for years been predicting just such a period of activity and prosperity. The leading financiers of America and Europe now see that here in the South is to be the richest country in the world; that no where else on earth is there such a combination of advantages—cotton, iron, coal, timber, the best of climates, cheapness of manufacture that cannot be duplicated elsewhere, agricultural resources outside of cotton equal to the best of any country, and many other advantages. This is a combination which affords a solid foundation for a growth in trade, in manufactures, in agriculture and in population surpassing anything ever known. This is strong language, but none too strong.



## Economic Power at the South.

[For the MANUFACTURERS' RECORD.]

Any general statement of Southern resources and of the opportunities offered for industrial development would be incomplete that omitted mention of the unutilized water-powers of all those States. Not only is there the heavy flood of the Mississippi and its tributaries and the ebb and flow of the tides in the harbors, but there are also multitudes of streams of greater or less importance that, descending from the mountains and high table-lands of the interior, flow with such steadiness and force as to furnish an immense and never-failing volume of power. In Europe the value of river currents and of tides has been known and employed for centuries. For hundreds of miles the Danube and other great rivers are occupied at frequent intervals by mills anchored on their bosom, in which grain is ground and other work done. We had formerly in this country, at a few places only, tide mills that were successfully operated for many years.

The application of steam as a motive force, the comparative cheapness of fuel, and the fact that during many weeks of severe winters it is impossible to use many water-powers at the North, and that during the summer months protracted drouths frequently compel manufacturing establishments to remain idle for a longer or shorter period, have to a large extent impaired, if not destroyed, the estimation in which water-powers were formerly held in the Northern States.

Now that industrial development has fairly begun in the South, and promises to reach proportions immensely beyond anything that the country has heretofore known, it is important that attention should be paid to these natural sources of power that are found in every one of those States, and that capitalists and manufacturers should consider them in connection with intended enterprises.

When Gen. Francis A. Walker laid out his plan for the Tenth United States Census he had a survey of the water-powers of the Southern Atlantic water shed made by Mr. Geo. F. Swain, instructor in civil engineering in the Massachusetts Institute of Technology, Boston, Mass. It was the first systematic account of the vast water-power of that region that has ever been attempted. It is replete with facts of great interest and of the utmost importance. Mr. Swain divides the water shed into three systems, the belts running in a north-easterly direction, parallel for the most part with each other and also with the sea-coast of the southeast, and with the general trend of the Appalachian mountains.

In the limits of this article we cannot give further space to this high authority, but can only refer our readers to the census volume in which it is contained. It is sufficient to say that both North and South Carolina contain water-powers in such numbers, and of such volume, that the aggregate of them represent more wasted force than all that is generated at present throughout the United States by steam engines used in every capacity. It is also a peculiarity of very many of these streams that they run over rocky beds, between rocky banks of such sufficient height that the danger of breakage to dams and the overflow of a country where storage is found necessary, is reduced to a minimum or does not exist at all.

As an illustration, let us take the streams of South Carolina in which there are four systems, consisting of the following rivers and their tributaries, viz: the Pedee, Santee, Edisto and the Savannah. The aggregate drainage area of these four rivers is 81,178 square miles. The total length of these rivers and their tributaries is 1,930 miles. In the Santee system, two rivers and their tributaries—the Catawba and the Broad—have an aggregate drainage area of

9,325 square miles, while the Santee itself has 14,725, and the Congaree and its tributaries 7,965. This vast drainage area, coming from the great water-shed of the Appalachian range—a range covered with woodlands which occupied, according to the census of 1880, something more than 75 per cent. of the surface—is an absolute guarantee of perpetuity of the water supply, and of its freedom from danger of those destructive freshets that have caused disaster and loss in many other sections.

At the Van Patton's shoals on the Enoree river, so very even is the edge of the rock that a single plank bolted to it forms a sufficient dam, by which 1,550 horse-power may be utilized. This statement can be truthfully applied to a very large percentage of all these water-powers.

In his summary of powers of the rivers in South Carolina, Mr. Swain furnished the names of the streams and localities, the drainage area in square miles, the length of each fall, the minimum and maximum flow per second, and the minimum horse-power available and the maximum of storage. Among these he names the eleven shoals of Broad river, and shows that in two alone, the "99 Island" and the "Cherokee," within a few miles of the town of Blacksburg, and within four miles of the lines of the Richmond & Danville and the Charleston, Cincinnati & Chicago Railroads, there is a fall of more than 100 feet within a length of 3 1-5 miles, and that these shoals have a storage capacity of 13,800 horse-power, while, on all the shoals he names, which extend from the North Carolina boundary to the city of Columbia, there is a storage capacity of 52,556 horse-power.

As all this county from the North Carolina line to the capital city of Columbia is in the midst of a region abounding in iron, copper, limestone, barytes and other ores and minerals, and in timbers of nearly all kinds that are used for manufacturing materials, and as very much of it is surrounded by cotton plantations that supply great numbers of bales to commerce, and as railroads pass in close proximity to this river, there is every reason why the entire length described should eventually be occupied by a continuous series of mills and factories using this vast power that now runs to waste. And what has been said of this part of the South is true of many other localities, in so far as their water-powers are concerned.

In 1883 the State of South Carolina published a statement, respecting its water-powers, in which, among other facts, were given the cost per horse-power per annum of several factories in that State, based upon a charge of 7 per cent. on the capital invested in the dams and canals by which such powers were utilized. The average for the whole six mills was \$1.70 per annum per horse-power. If there is any manufacturing establishment in the entire North or West that at all approaches this low cost for power, the fact has never been published. If, in addition to that, it is considered that these powers are unfailing, that the costs annually for repairs are so trifling as scarcely to be taken into account, and that there are no losses of time, and consequently, of interest upon capital, because of drouths, freezes and freshets, it would seem as if these water-powers of the South would furnish the most economic force that could be employed for all industrial operations.

MR. FREDERIC TAYLOR, a New York banker, says: "We shall one day within the comparatively near future be amazed at the changes in the South, at the phenomenal development of its varied resources and the enormous increase in its population and material riches."

## IDEAL COTTON FACTORY SITE.

[For the MANUFACTURERS' RECORD.]

A few miles east of Birmingham runs a high, dry, healthy ridge, and, what is more, it is underlaid with iron. Where the Louisville & Nashville, the Queen & Crescent, the Richmond & Danville and the Georgia Central Railroads cut through this watershed there are to be found certain concatenated advantages, the outgrowth of which will be the unlimited production of pig iron at less cost, it is said, than at any other point in America. Indeed, it has been predicted by practical men that the day is not far distant when the furnace owners of Gate City, in Alabama, will have it in their power to even beard the British lion in his den.

However likely that may be, no man can investigate Gate City without realizing that it is certainly a spot for cotton factory men to take advantage of.

"But," it may be asked, "what has the cheap production of pig iron to do with the cheap production of yarns and fabrics? Why is Gate City a better location than thousands of others throughout the cotton country?"

The following "Because" more than answer the question:

Because the labor is there ready and waiting. For Gate City has many men and will have more working in its furnaces, rolling mill and glass works, the female members of whose families, having nothing to do, are anxious to, and can afford to, work in a cotton factory at lower wages than must be paid at points where there already exist openings for women and girls. With the multiplication of Gate City's iron industries female labor available for cotton mills will be augmented.

Because superior steam-coal will be laid down to a cotton factory here at a dollar and fifteen cents a ton.

Because there is a great artesian water supply which is chemically pure.

Because, standing on a water-shed, the town is thoroughly drained and therefore healthy.

Because the Gate City Land Co. offers as a donation 30 acres of land; and this land will be worth a great deal of money.

Because with the pick of all the lands in the Birmingham district the Messrs. Sloss choose this particular spot for a model manufacturing town, and the Messrs. Sloss are not only practical and successful men, but are familiar with the pros and cons of every square mile in this section of Alabama.

Because Gate City is not liable to be subjected to whimsical changes of management, Mr. Maclin Sloss, the president of the company, being there to stay.

Because each of the four railroads annually haul right through the town thousands of bales of cotton from districts where the choicest staple grows.

And, finally, because the railroads will haul to markets the product of a cotton factory at Gate City at a lower rate than could be procured outside of a furnace district, which is due to the immensity of the tonnage which will be furnished by Gate City furnaces and rolling mills—a tonnage greater than the cotton crops of Alabama, Georgia and Mississippi put together.

The glass factory here has just been completed and the materials upon the property tested. The sand will produce anything from green glass up to French plate, and can be delivered to the factory at 40 cents a cubic yard. With the following further advantages, immense railroad facilities, cheapest fuel in the world, and the nearest to the Southern market, as a glass producing district Gate City must become second only to Birmingham as an iron district.

T. P. G.

BIRMINGHAM, Dec. 11,

## Good Location for a New Town.

[For the MANUFACTURERS' RECORD.]

The writer has frequently been asked by men of means if he knew of a good location for a new manufacturing town where there was still a chance "to get in on the ground floor." For the benefit of such inquirers some facts are here given about a location in Alabama where the right man can make a fortune for himself and his associates. This is Leeds—a natural town-site, close to brown ore, close to red ore, with limestone, with fire-brick clay, with coking coal and steam coal at a dollar a ton, and with the certainty of being provided with railroad facilities second only to those at Birmingham.

Where is Leeds? Sixteen miles east of Birmingham, at the point where the Georgia Pacific and the Central of Georgia come together on their way to Birmingham, and where all other roads from the East and Southeast will have to come together, because this is the only gap in the mountains that it is practicable to get through. The other railroads that are coming through Leeds are the East & West of Alabama, now built to within twelve miles; the Chattanooga, Gadsden & Birmingham; the Talladega & Coosa Valley, now built to within 18 miles, and the Macon & Birmingham, 85 miles of which are now under contract. Moreover, the Louisville & Nashville and the Queen & Crescent are within six miles of Leeds at Trussville, and as both these roads own large bodies of mineral land close to Leeds, it will be to their interest and will pay them to build lines into Leeds.

And now a word about coal. It is not claimed that all the coal close to Leeds will coke, but there is one thick and easily mineable vein that will make as good coke as any in Alabama. Within a mile and a-half of Leeds are the Henry-Allen mines, the daily output of which is now 800 tons.

There are immense quantities of brown iron ore just east of Leeds, and of red iron ore eight miles west by rail. The brown ore is high enough in metal and low enough in phosphorus to be classed as a Bessemer. The exact percentages are 57.3 metallic iron, 0.026 phosphorus and 5.76 silica. There is a limestone quarry suitable for fluxing just on the edge of town with a 60-foot face. The celebrated Calera brand of lime is producible from this quarry. Moreover, this lime can be run into the kilns by gravitation. There is no place in Alabama that excels Leeds for brick works. A \$30,000 plant there is now making daily 40,000 bricks.

It is said that there is more good timber, hardwood and long-leaf pine around Leeds than is left standing in the vicinity of any other industrial town in the South. Leeds is abundantly watered by Moore's creek and East Cahaba river, which flow through the town. Its high altitude, 850 feet above sea level, and the natural drainage, make Leeds a healthy place and a desirable place of residence. It has a bold chalybeate lithia spring which in time may make the place a health resort. Another great advantage arises from the fact that the town is surrounded by a rich farming country. There are a great many other points of interest about the place. If any reader of what has been said should want to know more, full information can be had by writing to Col. J. A. Montgomery, at Birmingham, who can also tell about the inducements Leeds has to offer to manufacturing enterprises, or to a general development company.

THOMAS P. GRASTY.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$4 and you will receive it regularly for one year, or six months for \$2.00.

## Continued Activity.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

MIDDLESBOROUGH, KY., Dec. 16, 1889.

Since my last there has been considerable of importance transpiring in the "Marvelous City" that gives her even a stronger claim to her title of greatness.

On last Thursday the First National Bank was organized, with a capital of \$100,000. The officers elected were M. C. Alford, president; A. A. Arthur, vice-president; D. F. Frazer, cashier; W. J. Kinnaid, teller. A handsome brick building is being erected for the bank at the corner of Cumberland avenue and 21st street, and the intention is to commence business about January 1.

The bank of T. L. Bird will be changed into a State bank on January 1. It will have a capital stock of \$50,000. The stock has all been subscribed, and the bank has purchased the large brick building on the corner of Cumberland avenue and 20th street, known as the "Brooks Building," for which \$8,000 was paid.

When the First National opens its doors Middlesborough will have four substantial banking institutions, all of which are doing a most lucrative business.

On Wednesday a syndicate purchased of D. G. Colson 120 acres of land in the western portion of the city, which will be divided into lots. The price paid for the property was \$84,000. The new syndicate has organized as the West End Land Co. On the same day F. A. Hull, of Danbury, Conn., purchased 11,000 acres of timber and coal land on top of Canada mountain, which he will proceed to develop at once.

During the past few days quite a number of important contracts for industrial concerns have been signed, among them the steel works, to consist of three very important branches—steel rod works, steel nail works and sheet steel mill. This concern will have a capital stock of \$600,000, and will employ 250 men. The Middlesborough Coffin & Casket Factory, capital stock \$50,000; the Bent Wood Works, capital stock \$75,000; the Middlesborough Furniture Factory, capital stock \$150,000; the Middlesborough Ice Factory, capacity 6 tons per day, capital stock \$25,000.

The contracts for all these concerns, excepting the latter, specifies that work is to begin on them by January 1, 1890.

R. McPherson, representing Hall & Vaughn, of New York, arrived in the city Thursday and will begin work on their tremendous tannery at once. This will be the largest tannery in the world, having a capacity of 600 hides per day and employing between 4,000 and 5,000 men.

There was considerable activity in real estate during the past week. The town company has stopped the sale of its lots until January 1; this action was made necessary owing to the physical impossibility of the officers to make deeds to property as fast as they were needed. In this respect they are many weeks behind. Considerable property belonging to other parties, however, is changing hands every day.

New buildings are springing up in every direction, and since my report of November 28th over 100 new structures have been gotten under way. And the population is increasing every day; it is estimated now by conservative men at no less than 4,000. When it is taken into consideration that 8 months ago there was no Middlesborough, and that the inhabitants in this valley numbered 25, is this not a remarkable growth?

T. H. A.

**LOTS IN A LIVE CITY.**—Manufacturers contemplating removing their plants to the South, or establishing new factories in this section, will find a desirable location at South Lynchburg, Va. An advertisement in this issue describes an eligible property recently platted into building lots, which will be sold on easy terms.

## A 53,000-Spindle Cotton Mill—The Largest in the South.

Mr. E. G. Durfee, secretary and treasurer of the Franklin Machine Co., of Providence, R. I., in a letter to the MANUFACTURERS' RECORD under date of December 13 says of a new cotton mill to be built at Florence, Ala.:

"As the mill is to be larger than any single mill heretofore built in the South, perhaps you might like an account somewhat in detail. The plans which we have drawn are for the new mill of the Florence Manufacturing Co., of Florence, Ala., for which Mr. J. Coons, formerly of Huntsville, is the very able manager. The mill will be a three-story building, and Mr. Coons has placed orders for the following machinery:

1,000 horse-power compound non-condensing engine, from Cooper Engine Co., Mt. Vernon, Ohio.

15 pickers, from the Atherton Machine Co., Lowell, Mass.

90 new pattern top flat cards, 36x48-inch cylinders, with coilers, from Franklin Machine Co., Providence, R. I.

38 roving frames, from Providence Machine Co., Providence, R. I.

88 deliveries of coiler drawing, from Atherton Machine Co., Lowell, Mass.

40,080 Rabbeth spinning spindles and 10,800 Rabbeth twisting spindles, from Fales & Jenks Machine Co., Pawtucket, R. I.

2,700 spooler spindles, from Franklin Machine Co., Providence, R. I.

The Franklin Machine Co. will also furnish and put up the shafting for the mill, which will be built after the most modern style, and will be supplied with the most perfect systems for heating, ventilation and protection against fire that has yet been devised. The entire machinery will probably be in operation about July next."

## Business Chance.

Very rarely has there been placed before the public a more inviting opportunity for investment than will be found in the advertisement of the North Carolina Steel & Iron Co. This company owns very large bodies of the highest grade Bessemer ores, which experts say can be delivered to the furnace at a cost of not over \$1 a ton, an abundance of limestone and 2,000 acres of town property adjoining Greensboro, which is one of the most attractive and progressive towns in the South. In less than a year this town property alone ought easily to be worth more than the entire capital stock of the company. It is proposed to build a 150-ton Bessemer furnace at the start, and to follow this with a steel rail mill. The 2,000 acres of land adjoining the town will be laid out with streets and opened up for settlement. A large part of the stock has already been subscribed at par, and the balance is offered for sale to those seeking good investments.

**SUPERIOR ROOFING TIN.**—The well-known house of Merchant & Co., Philadelphia, have the reputation of supplying to the trade the best grades of roofing tin. Their brands are "Gilbertson's Old Method, Merchant's Roofing and Camaret." The house guarantees every box of plates, stamps the brand and thickness on every sheet, and the net weight of the 112 sheets on each box, and excludes "wasters" or defective sheets.

**THE Chicago Rawhide Manufacturing Co., Chicago, Ill.,** one of the best known and largest manufacturers in the world of rawhide belting and other specialties, now make a variety of rawhide rope, used instead of belting for transmitting power. They are very popular with electric-light and power people; being non-conductive, none of the electric current is lost. The rawhide "rope belting" is very durable, if not nearly indestructible, and very cheap as compared with other belting.

**HOLIDAY ART NOVELTIES.**—The illustrated catalogue of art novelties, holiday cards, etc., just issued by L. Prang & Co., 16 Astor Place, New York, describes at length the varied and manifold productions of this well-known and meritorious house for the season of 1889-90. It would be difficult to particularize the many excellent novelties which are offered. In the way of art books, booklets, Christmas and New Year cards, the work of the designers, artists, editors and mechanics employed by the house is up to the accustomed high standard. The subjects of illustration have an American origin and flavor which, other things being equal, must commend the works issued by Prang & Co. to the American public. The holiday cards cover a wide range of subjects and designs, and are admirably executed. The fine art pictures and art books and booklets embrace a variety of interesting, and, for the most part, novel conceits, which cannot but appeal to popular taste and approval.

## A Sample Letter.

EXECUTIVE OFFICE  
MIDDLE GEORGIA & ATLANTIC R. R. CO.  
E. C. MACHEN, Pres.

MACHEN, GA., Dec. 11, 1889.

R. H. EDMONDS, Esq.,

Editor Manufacturers' Record:

Dear Sir—Inclosed please find my check for \$4 to cover subscription for one year from this time.

Congratulating you upon the phenomenal success of your paper, I beg to add that it seems to be based upon merit. Certainly the South owes you no less a debt of gratitude than those who have through your guidance come hither.

We are beginning to realize to a proper extent the value of having an exponent of industrial enterprise such as yours, because of your vast sources of information and the manner in which you distribute it when once obtained. Keep up the good work, and may its results be as profitable to you directly as they are advantageous to those who profit by it indirectly.

Yours very truly,

E. C. MACHEN.

**ACTIVE TIMES AT FORT PAYNE—FORT PAYNE, ALA., Dec. 4, 1889.**—A builders' hardware manufactory is to locate here right away. The plant is to move from Cincinnati, O., and is to be operated by F. H. Foster, of Florence, Ala., who is to locate here. The capital stock is \$400,000, of which sum our people subscribe \$100,000. They will employ 500 to 700 men, nearly all skilled labor. They are now perfecting plans to move. It is also true that a basket factory will locate here. It will move from Ohio and will employ 150 hands. We would also state that the stock, \$125,000 cash, for a second furnace will have all been taken by December 15th; also that parties will start East this week to solicit for a third furnace; also that we have proposals from Massachusetts parties for a fourth iron furnace, and six men guarantee \$60,000 of the \$125,000 necessary. Thus you see that the probabilities are almost assured that within the next eight months Fort Payne will have four iron furnaces in blast. The industries already assured and stock all subscribed will employ over 3,500 hands. We are considering many propositions from other manufacturers with a view of locating here. Put us down for 15,000 people within eighteen months.

C. O. GODFREY,  
Mngt. Ft. Payne Coal & Iron Co.

**A NEW TOWN—SALEM, VA., Dec. 6, 1889.**—The Craig City Improvement Co., organized to lay off into a town 1,300 acres of land adjoining Newcastle, Craig county, Va., recently purchased by it, and will develop same by erecting factories, a furnace, &c. The present terminus of Craig Mineral Railroad, now being built from Eagle Rock, Va., to Newcastle, will be on this land. O. F. Connell, of Portsmouth, Ohio, president.

W. W. BALLARD.

**LARGE MACHINE WORKS—ROANOKE, VA., Dec. 4, 1889.**—We have organized the Roanoke Engine & Machine Co., capital stock \$100,000, with L. H. Simmons, president; Wm. Lunsford, vice-president; T. T. Powell, secretary; T. T. Fishburne, treasurer; D. Scull, M. M. Rogers, C. A. Hoffman, R. H. Day, J. T. Engleby, E. Winninger, Dr. Jos. A. Gale, Andrew Lewis, as directors. Will want machinery, but cannot say what or how much, as the superintendent has that in charge.

L. L. POWELL &amp; Co.

## Morristown Notes.

MORRISTOWN, TENN., Dec. 6, 1889.

Editor Manufacturers' Record:

The Business Men's Association has been merged into the Chamber of Commerce, with Mr. R. L. Gant as president and Mr. E. M. Grant, secretary.

The Iron Belt Railway Co., composed of a number of the leading business men and capitalists of Morristown, has filed its charter. The purposes of the company, as stated in the charter, are to build and operate a railway between Morristown, Hamblen county, Tenn., and Cumberland Gap, in Claiborne county, Tenn., or to make connection with some railway that will or does extend to Cumberland Gap, with the right to build such branch lines and extensions as may be deemed advisable or necessary in order to develop the mineral resources of the adjacent country, &c.

A Knoxville syndicate has purchased \$27,000 worth of unimproved land adjoining the town for city extensions.

Proposals for the erection of a woolen mill, a cotton mill and a cotton machine manufacturing establishment are under consideration.

The scheme of Boston capitalists for building a railroad Southwest from Morristown to connect with the Blue Ridge system seems to be taking definite shape.

The wonderful deposits of iron ores, manganese, marble, &c., in the vicinity are beginning to attract much attention, and rumors of big deals are rife.

**ANOTHER FURNACE—BRISTOL, TENN., Dec. 6, 1889.**—Contract has been closed for building 150-ton furnace at Bristol, Tenn., work to commence at once, by a Philadelphia syndicate composed of A. S. Patterson, Justice Cox, Saml. Dickson, W. H. Trotten and other well-known iron men of Pennsylvania.

B. L. DULANEY.

**DEVELOPING SOUTH AMERICAN TRADE—ORANGE, TEXAS, Dec. 7, 1889.**—We have organized a line of vessels to Mexican and South American ports. We have already three in the trade, and will add to them as fast as the trade will warrant it. We propose mostly to ship lumber to these countries, and bring in return dye-woods, mahogany, etc. The first of the year we will commence building a saw and shingle mill at or near New Orleans, and will then want to make arrangements for machinery for same.

LUTCHER &amp; MOORE.

## The Birmingham Stock Exchange.

This institution is doing a great deal of good for the South, and it stands fifth on the list of stock exchanges in this country. About one hundred millions of securities are listed and dealt in, and amongst these will be found many desirable and safe investments, returning handsome dividends. All stocks and bonds here which have merit can now be purchased to better advantage, perhaps, than at any time in the future, as prices touched bottom about one year ago, and a steady healthy advance set in then which will undoubtedly continue until they reach much higher figures. New York, Boston, Philadelphia, Baltimore and many other cities, large and small, all over the country, as well as abroad, have been buying judiciously for the past twelve months, and an immense amount of money has been made and will yet be made.

The Birmingham Stock Exchange was organized three years ago, the moving spirit being Mr. Wm. B. Lightfoot, of the private banking and broking firm of Lightfoot & Co., who is now vice-president. Mr. Lightfoot came to Birmingham from New York city, and has been one of the hard workers and foremost promoters of the prosperity of the Magic City. Persons who contemplate investments in Alabama are advised to correspond with such firms as Lightfoot & Co.

The year 1890 will be a most prosperous one, not only for Birmingham, but for the entire mineral district which this particular city represents, and an immense amount of capital is now being changed from the low-dividend and interest-bearing securities of the older countries to this new and attractive field for investors. While a great deal has been done already, sufficient to attract the attention of the capitalists of the world, still the next five years will heavily discount all accomplishments of the past.



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BIRMINGHAM, ALA.

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Surplus and Profits - - 63,192.52.

Has Largest Capital Stock of any National  
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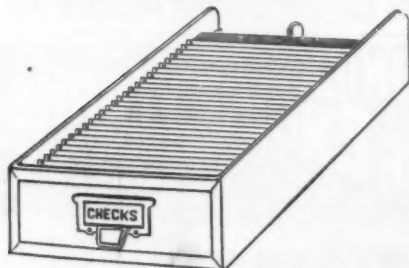
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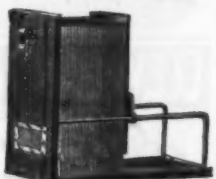
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## REPORT OF THE CONDITION

## FIRST NATIONAL BANK,

BIRMINGHAM, ALA.

At the Close of Business, December 8th, 1889.

RESOURCES.		LIABILITIES.	
Loans and Discounts	\$1,152,576 17	Capital Stock paid in	\$ 250,000 00
Premiums	10,000 00	Surplus	150,000 00
U. S. Bonds	100,000 00	Undivided Profits	46,493 33
Other Bonds	12,500 00	Circulation	45,000 00
Real Estate, Furniture and Fixtures	66,500 00	Deposits	1,145,010 54
Expenses and Taxes paid	16,614 00	Due to Banks	57,301 92
Due from Banks	198,946 95		
Due from U. S. Treasurer	4,265 54		
Cash on hand	133,373 72		
Total	\$1,694,775 79	Total	\$1,694,775 79

E. W. LINN, Cashier.

W. J. CAMERON, Pres.

J. P. MUDD, PRES'T W. S. BROWN, VICE-PRES'T. J. H. BARR, CASH'R.

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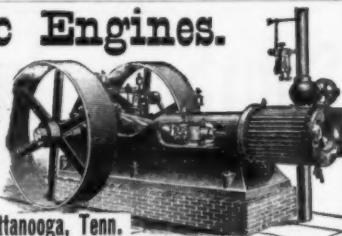
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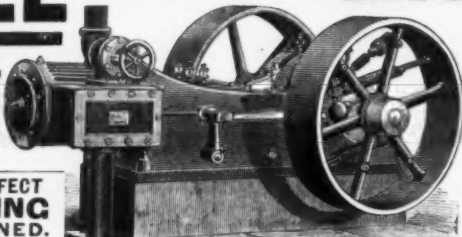
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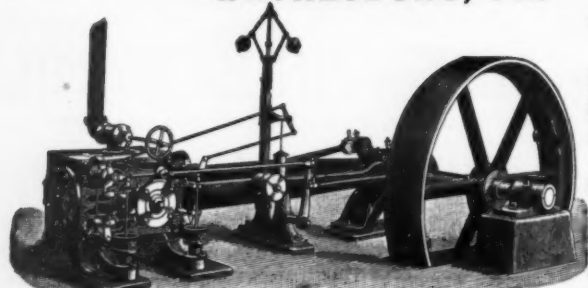
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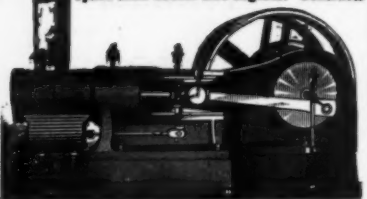
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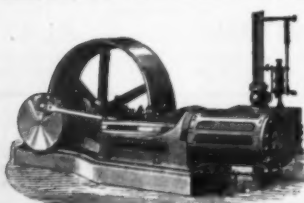
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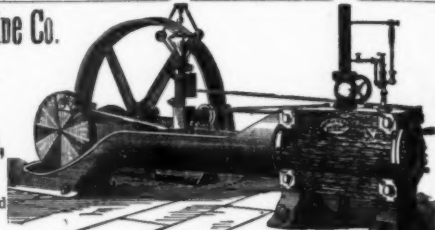
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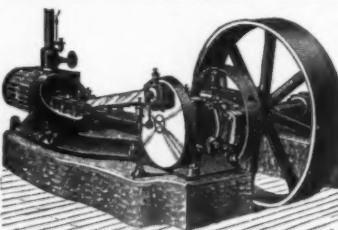
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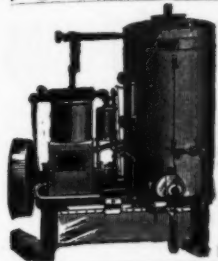
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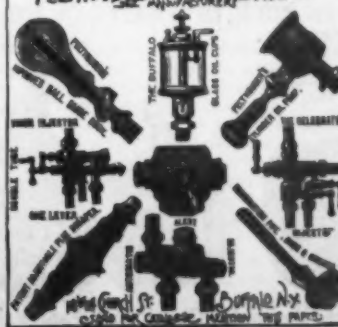
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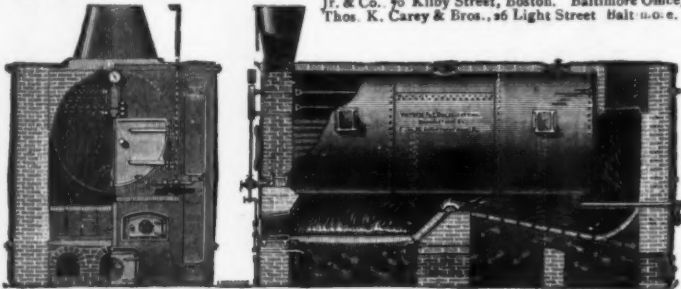
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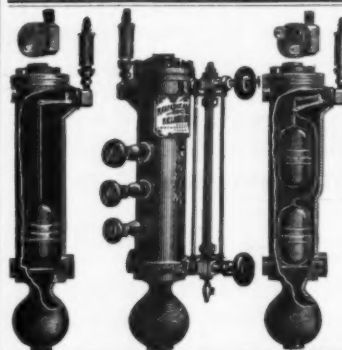


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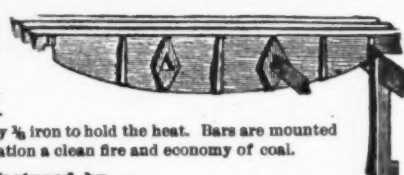
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 Lenoir Manufacturing Co., Lenoir, East Ten-  
 nessee.  
 Vancleave Mill, Graniteville, S. C.  
 Charleston Electric Light Co., Charleston, S. C.

## The Corey Grate Bar.



This grate consists of single bars  $\frac{1}{4}$  thick  
 at top and  $\frac{1}{4}$  at bottom, sides being con-  
 caved, and gives  $\frac{1}{2}$  inch air space, with only  $\frac{1}{4}$  iron to hold the heat. Bars are mounted  
 on vibrating bearings, insuring by its operation a clean fire and economy of coal.

— Manufactured by —

**Phenix Iron Foundry, Providence, R. I.**



## JENKINS BROS.' VALVES.

Every valve tested and warranted, all parts interchangeable.  
 Nothing but best Steam Metal used in the manufacture.  
 Keyed Stuffing Box and Disc Removing Lock Nut  
 Used only in the Jenkins Bros.' Valves.  
 None are genuine unless stamped with "Trade Mark."  
 Should you order INSIST on having Jenkins Bros.' Valves.

71 John St., New York.  
 21 N. Fifth St., Philad'a.  
 54 Dearborn St., Chicago  
 105 Milk St., Boston.

## LUDLOW VALVE MFG. CO.

Office and Works: 938 to 954 River St., and 67 to 83 Vail Ave., Troy, N. Y.

### VALVES

Double and Single Gate,  $\frac{1}{4}$  inch to 48  
 inch., outside and inside Screws,  
 Indicators, etc., for Gas,  
 Water, Steam, Oil.  
 SEND FOR CIRCULAR.



Also Fire Hydrants, Yard and Wash Hydrants, Check and Foot Valves.

**THE CURTIS**  
 PATENT RETURN STEAM TRAP.

IT is noiseless, positive, rapid, will return all condensation back into the  
 boiler, and works equally well in connection with reduced pressure or  
 exhaust steam, also when the return is below the water line of the boiler.

**THE CURTIS REGULATOR COMPANY,**  
 No. 160 BEVERLY ST., BOSTON, MASS.

GENERAL AGENCIES.  
 NEW YORK, 109 Liberty St. CHICAGO, 218 Lake St.  
 PHILADELPHIA, 2035 N. Front St. ST. LOUIS, 511 Walnut St.  
 MINNEAPOLIS, 210 S. Third St. NEW ORLEANS, 21 Union St.

**THE A. W. HARRIS OIL CO.**  
**VALVE OIL**  
 110 & 111  
 So. Water St.  
 PROVIDENCE, R. I.

Valve Oil for Internal  
 AND  
 Engine Oil for External  
 LUBRICATION  
 OF  
 Steam Engines.

**THE A. W. HARRIS OIL CO.**  
**ENGINE OIL**  
 110 & 111  
 So. Water St.  
 PROVIDENCE, R. I.

A Barrel of Each of these OILS Sent Subject to Approval upon Application.

WRITE FOR QUOTATIONS AND CIRCULAR.

ESTABLISHED 1832 ON PRESENT PREMISES.

The Best  
 —IS—  
 ALWAYS  
 —THE—  
 Cheapest.



Therefore  
 BUY OUR  
**COLOPHINE**  
 —OR—  
 Perfect Oils

The above are our specialties in MACHINERY OILS, and are the best oils for  
 the price manufactured. We can give you anything in the OIL LINE, any grade, at  
 the very lowest prices. Correspondence solicited.

**WM. C. ROBINSON & SON,**  
**MANUFACTURERS AND DEALERS IN OILS,**  
 217 South Street Baltimore, Md.

**THE MANUFACTURERS' RECORD**  
 IS THE FOREMOST EXPONENT OF THE INDUSTRIAL  
 INTERESTS OF THE SOUTH.



# Southern \* Railroads.

## Let Boards of Trade Wake Up.

A necessary adjunct to a wide-awake city is a wide-awake board of trade. In no part of the country has this been better exemplified than in the West. Take typical trade centers like Chicago, Kansas City, Minneapolis, Denver and other places of much smaller size. The boards of trade are never caught napping, and every possible thing that may benefit or injure the city is encouraged or checked as the case may require. In the South boards of trade have much to learn from this Western wakefulness. A case of vital importance is at hand now in Baltimore which requires instant and vigorous action, yet which has been allowed to drift along for two weeks or so, owing to this lack of watchfulness. The Baltimore & Ohio Railroad served notice on the leading steamship line of Baltimore that on and after January 1st it would furnish no more wharfage, honor no through bills of lading nor accept any bills of lading from feeders or connecting lines for merchandise for this steamship line.

Such high-handed action should have brought the local board of trade into instant action, for the steamship line in question brings about 150 steamers a year to Baltimore. As we go to press no formal action has yet been taken, though we are informed that a meeting is called. Fortunately in this individual case, so we are informed on the best of authority, the Pennsylvania Railroad intimated to the steamship line that it would furnish all the wharf room it needed and give it the benefit of its most excellent service. The Chesapeake & Ohio Railroad, too, offered the line special inducements if it would transfer its steamship service to Newport News, Va. The ultimate result will probably be that some of the service will be transferred to Newport News, but the most of it kept in Baltimore by the timely and friendly action of the Pennsylvania Railroad. But what such an occasion as this required was an aggressive board of trade which should promptly have taken the matter in hand and kept all the trade in Baltimore. The fact that the Baltimore & Ohio Railroad had a lot of stock in another steamship line is no excuse for attempting to deliberately strangle a vigorous competitor, and there should have been some organized body to defend the steamship line and the merchants of the city.

Such an important and vital matter as this is liable to happen any day to almost any vigorous and growing city and should be a lesson for the boards of trade in such places to be ever watchful. Vigorous assault demands vigorous defense, and no city can be well guarded against

damage to its growth or trade when it has no board of trade ready for vigorous action at an instant's notice to defend it.

## To Relieve Freight Traffic.

The Baltimore & Ohio Railroad has undertaken a scheme for the relief of its freight traffic which is quite radical, yet a most promising arrangement. The road has purchased between four and five hundred acres of land at Berlin, Frederick county, seventy miles from Baltimore, on its main line. This will be used as a general freight distributing point, where merchandise in mixed train loads and in made-up car lots can be assorted into complete train loads. The company has long felt the necessity for larger terminals at Baltimore, but by such an arrangement as this it saves the great cost that such facilities would cost in Baltimore. A number of warehouses will be put up at Berlin for the business, and sufficient side-tracks built to properly separate all freight, whether east-bound or west-bound. Mt. Clare and Locust Point will be greatly relieved by the new yard. By keeping the small terminals clear and sidings unoccupied, a great saving will be effected in the wear and tear of equipment and road-bed, and leaving them freer, will improve the service of both and the equipment probably to the extent of twenty-five per cent.

By the help of this new yard, when a train of car lots for different divisions reaches Berlin, cars can be selected for complete trains along each line and shipped to their destination without cumbering the sidings, tracks or small yards of cities or towns through which they pass. In the case of coal and grain trains made up of a number of cars for large shippers who are not ready to load vessels at Locust Point, the cars can be kept in the yard and moved on telegraphic order.

THE Kentucky Central Railroad Co. has just closed a contract with the Schenectady Locomotive Works, Schenectady, N. Y., for five engines. Four are large freight locomotives and the other one is a yard engine.

TO BUILD A RAILROAD.—NEW YORK, N. Y., Dec. 4, 1889.—The French Broad Valley Railroad Co. has placed construction of road in the hands of a committee of which the undersigned is chairman. Contracts for grading road will be given out in about three weeks. The president and treasurer's office is at 32 Wall street, New York; balance of officers at Asheville, N. C. Contracts will be given from New York office. Road will start from Asheville; Southern terminus will depend on various matters. Will build 30 miles to Wilsons; balance of road not yet determined. Grading fair; maximum curve 6 degrees; maximum grade 30 feet. Expect to have 30 miles in operation inside of three months. C. G. Dvortt, Pres.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South cannot find a better medium than the MANUFACTURERS' RECORD.

## Railroad Construction

Alexandria, Va.—Street Railway.—H. Strauss, I. Eichberg and George Fisher have asked permission to build and operate a street railway in Alexandria.

Alum Springs, Ky.—Railroad.—The construction of a railroad from Alum Springs to Junction City is being agitated.

Alum Springs, Va.—Railroad.—Application has been made by James A. Frazier and others to incorporate the Rockbridge Alum Springs & Goshen Railroad Co. to build a ten-mile road from Rockbridge Alum Springs to Goshen.

Asheville, N. C.—Railroad.—Runcombe county, N. C., will vote on taking \$400,000 of stock in new railway connections, half of which, if voted, is to be taken in the Atlanta, Asheville & Baltimore Railroad, recently mentioned.

Asheville, N. C.—Railroad.—The French Broad Valley Railroad Co., recently mentioned, will give out contract for the construction of its road from its New York office, 32 Wall street. The company contemplates building its road to Wilsons; the balance of the road undetermined. It is expected that 30 miles will be in operation within three months.

Atkins, S. C.—Railroad.—The Bishopville Railroad Co. contemplates the extension of its road and has applied for permission from the legislature to do so.

Augusta, Ga.—Railroad.—It is rumored that the Augusta, Gibson & Sandersville Railroad Co. (narrow-gauge) has been purchased by Northern capitalists, who will make it standard gauge and also extend it to Thomasville, Ga.

Berkley, Va.—Street Railway.—Material for the construction of the Berkeley Street Railway Co., previously mentioned, is being purchased, and it is stated that work will begin by January 1.

Berlin, Md.—Railroad.—The report made several weeks ago that the Baltimore & Ohio Railroad Co. would establish freight yards has been confirmed. It also is stated Berlin will be made the terminus of the Washington County Railroad instead of Wewerton, and of the Winchester & Potomac Railroad instead of Harper's Ferry.

Bridgeport, Tenn.—Railroad.—J. W. Hudson, Bridgeport, and others have incorporated the Cumberland Mountain & Tennessee River Railroad Co. to build a railroad from a point on the Tennessee river opposite the new town of Kimball, recently mentioned, to Lancing, nearly 100 miles northeast. Engineers have begun surveying the route.

Bristol, Tenn.—Railroad.—The Willey Boom & Lumber Co. will construct a two-mile railroad.

Buena Vista, Va.—Railroad.—The Buena Vista Iron Co. will build a railroad from their furnace to Loch Laird Junction.

Charleston, S. C.—Railroad.—The East Shore Terminal Co. has been incorporated to build a short road by F. S. Rogers, William E. Huger, S. J. Peggall and others. Capital stock \$10,000.

Charleston, W. Va.—Railroad.—John B. Floyd, G. O. Chilton, M. H. Dyer and others have incorporated the Covington & New River Railroad Co.

Clifton Forge, Va.—Railroad.—It is reported that the Chesapeake & Ohio Railroad Co. (office, Richmond, Va.) will build a branch 22 miles long to Warm Springs, Va.

Cochran, Ga.—Tram-road.—The Parrott Lumber Co. will build a tram-road.

Columbia, S. C.—Railroad.—The Southern Construction Co. have asked permission to relay the railroad to the Granby quarry.

Corpus Christi, Texas.—Street Railway.—A street railway will be built by the Port Avansas Co. E. H. Ropes can give information.

Covington, Ky.—Electrical Railway.—The Covington & Cincinnati Street Railway Co., previously mentioned as to operate their railway by electricity, has closed a contract with the Short Electric Co., of Cleveland, O., for equipping their road.

Danville, Va.—Railroad.—It is rumored that the Richmond & Danville Railroad Co. will purchase the Danville & New River Railroad and extend it in the direction of the Atlantic & Danville Railroad Co.'s proposed Western extension. A later rumor reports that the Atlantic & Danville has probably purchased the Danville New River Road.

Dayton, Tenn.—Tram-road.—H. L. Reynolds will build a tram-road one mile long.

Denison, Texas.—Railroad.—The St. Louis & San Francisco Railway Co. (office, St. Louis, Mo.) contemplates the construction of five branch lines as follows: from Rogers, Ark., to Albuquerque, N. M.; from Tallequah, I. T., to a point at or near Texarkana, Ark.; from Fort Smith, Ark., to a point at or near Arkansas City, Ark.; from a point on the main line in the Choctaw Nation to Denison, Texas; from Fort Smith, Ark., to Fort Reno, I. T. The five branches, when built, will aggregate 2,000 miles in length.

Denison, Texas.—Railroad.—The St. Louis, Arkansas & Texas Railroad Co. (office, St. Louis, Mo.) contemplates building a road from Denison to Sherman, or as far as the Red river.

Denison, Texas.—Street Railway.—Dr. Archeson and others contemplate the construction of a street railway.

Fort Smith, Ark.—Railroad.—The survey of the Kansas City, Nevada & Fort Smith Railroad, mentioned recently, will be commenced immediately.

Hendersonville, N. C.—An election will be held for the purpose of deciding whether Henderson county will appropriate \$50,000 to the French Broad Valley Railroad Co., previously mentioned.

Irontdale, Ala.—Dummy Line.—It is reported that a dummy line will be built shortly.

Jonesborough, Ark.—Tram-road.—W. R. Santley & Co. will build a tram-road.

Knoxville, Tenn.—Railroad.—The Tennessee Coal Mining Co. will move their trestle and re-erect it.

Knoxville, Tenn.—Railroad.—The East Tennessee, Virginia & Georgia Railroad Co. has, it is reported, purchased the Knoxville & Augusta Railroad.

Laury, Ala.—Railroad.—The Laury & Jackson Lumber Co. contemplates the construction of a 20-mile railroad. P. S. Fitzgerald, chief engineer, Gadsden, Ala., can give information.

Lewisburgh, W. Va.—Railroad.—E. C. Haines, of New York, contemplates, it is stated, the construction of a five-mile railroad to Ronceverte.

Little Rock, Ark.—Electrical Railway.—The Citizens' Street Railway and the Little Rock Street Railway have been purchased by a syndicate of Chicago capitalists; price stated to have been paid \$350,000. The syndicate contemplates substituting electric motors soon.

Little Rock, Ark.—Railroad.—The Kansas City, Bentonville & Southeastern Railway Co. has been incorporated to build a 125-mile railroad from some point in Benton county, Mo., to Clarksville, Ark. Capital stock \$1,500,000.

Little Rock, Ark.—Railroad.—The Memphis, Little Rock & Indian Territory Railroad has been incorporated by J. A. S. Nelair, B. E. Orr, F. H. Smith and others to build a line of road from Argenta to a point on the Arkansas and the Indian Territory boundary line. Capital stock \$8,000,000.

Louisville, Ky.—Railroad.—It is reported that the Louisville & Nashville Railroad Co. will shorten its line between Louisville and Lexington.

Memphis, Tenn.—Belt Railroad.—The construction of a belt railroad is being agitated.

Middlesborough, Ky.—Railroad.—It is stated that the railroad from Madison, Ind., to Cumberland Gap will probably be built shortly. John W. Lee, Bedford, Ky., or Jos. Abbott, Milton, Ky., can give information.

Montgomery, Ala.—Cable Railway.—The Montgomery Terminal & Street Railway Co. is investigating the underground cable electric street railway system with a view to adopting it.

Monticello, Ark.—Railroad.—S. W. Fordyce, receiver of the St. Louis, Arkansas & Texas Railroad Co. (office, St. Louis, Mo.) states that the company will not build a road from Monticello to Rison, as mentioned last week.

Palatka, Fla.—Railroad.—A railroad to Homosassa is contemplated.

Radford, Va.—Street Railway.—A bill has been introduced in the Virginia legislature for the incorporation of the Radford Street Railway Co.

Red Boiling Springs, Tenn.—Railroad.—The company recently mentioned as to erect a hotel, which will cost \$75,000, also contemplates the construction of a railroad through Macon county.

Richmond, Va.—Railroad.—A bill has been introduced into the Virginia legislature to authorize the consolidation of the Martinsburg & Potomac Railroad Co. and the Cumberland Valley & Martinsburg Railroad Co.

Richmond, Va.—Railroad.—It is reported that Mason, Hoge & Co. have been given the contract for grading the Richmond & Chesapeake Railroad to a ferry connection with the Baltimore & Drum Point Railroad at Piny Point, Va., and completing the tunnel at Richmond.

Richmond, Va.—Railroad.—The following bills have been introduced into the Virginia legislature: to authorize the union of the Chesapeake & Ohio and Richmond & Alleghany Railroad Cos., and to incorporate the Washington & Western Railroad Co. Henry Fairfax, E. W. Jones and others are the corporators.

Roanoke, Va.—Railroad.—The Norfolk & Western Railroad Co. has let the contract for bridge work on the North Carolina extension to the American Bridge Co., of Roanoke.

Rockville, Md.—Railroad.—The Glen Echo Railroad Co. has been incorporated to build a road from a point near the village of Tenleytown to a place called Glen Echo Heights. Frederick W. Pratt, James C. Pratt, of District of Columbia, and others of Montgomery county are the incorporators.

Salisbury, N. C.—Railroad.—The Greenville Construction Co. secured the contract for constructing 40 miles of track on the Yadkin Railroad, recently mentioned as let.

Stevenson, Md.—Railroad.—The Maryland Midland Railroad Co., previously reported, is surveying a line for the proposed road to Freedom, Pa.

Tate, Ga.—Railroad.—It is reported that a railroad will be built to Lula.

Tyler, Texas.—Street Railway.—F. C. Gunn, of Kansas City, Mo., contemplates constructing a street railway at once.

Vicksburg, Miss.—Railroad.—It is reported that the Illinois Central Railroad Co. (office, Chicago, Ill.) will build a direct line of road between New Orleans, La., and Natchez, Miss.

Washington, D. C.—Railroad.—Application has been made by Charles White, Robert Boyd and others for the incorporation of the East Washington Street Railroad Co. Capital stock not less than \$200,000 or more than \$500,000.

Washington, D. C.—Railroad.—The time for the completion of the Judson pneumatic plant of the Metropolitan Railroad Co., previously mentioned, has been extended 60 days.

Weatherford, Texas.—Railroad.—It is stated that the Weatherford, Mineral Wells & Northwestern Railroad will shortly be built. T. R. Stone can give information.

Wheeling, W. Va.—Belt Railway.—New York and Hartford capitalists contemplate the construction of a belt railroad to cost over \$4,000,000.

The Chesapeake & Ohio Railroad Co. (office, Richmond, Va.) desires bids, it is stated, for the construction of 20 locomotives, to be ten-wheelers.

### "The Hope of the South."

An original proposition occupied the place of honor in a recent number of Frank Leslie's Illustrated Newspaper, which bore this caption, "The Hope of the South." It was written by Col. Harry Skinner, of Greenville, Pitt county, North Carolina, one of the rising young men of that State, a lawyer, a financier and an extensive planter. Col. Skinner is zealously engaged in advancing the industrial interests of the South, and has long made the production, marketing and manufacture of cotton his special study. In the communication referred to he takes an advanced position and presents several novel ideas. He advocates protection for the cotton producers, by the establishment of warehouses under government management, where cotton shall be purchased at a price based upon an addition of forty-six per cent. to the average of nine cents per pound for middling, thus making a standard price of thirteen cents a pound, and that negotiable certificates be issued in payment therefor. Colonel Skinner's ground for this bold proposition is that the United States produces three-fourths of the cotton consumed by the world, and that three-fourths of all used in Europe is purchased in this country. At the same time the price is fixed a year in advance by the Liverpool Cotton Exchange, and our planters quietly submit to whatever is there decided. This is an anomaly in trade that ought to be and can be removed. The country that has the monopoly of any production can regulate its price. Colonel Skinner shows conclusively that there is no real danger of foreign competition if prices are advanced by recounting the ill success that attended British efforts to get cotton from all parts of the earth during our civil war. He thinks, and the MANUFACTURERS' RECORD is of the same conviction, that try as it may to avoid it, the world at large will have to draw the bulk of its cotton from the Southern

States of this country, and that consequently we can and ought to determine what its selling price shall be, instead of leaving that to be dictated by the consumers.

Thus far Col. Skinner and the MANUFACTURERS' RECORD are in accord. Something should be done to change the long prevalent custom, but the plan suggested by Col. Skinner has many grave objections that make its adoption impracticable. What the government cannot consistently do may, however, be accomplished by the cotton planters by establishing exchanges and warehouses owned and managed by themselves. What the Farmers' Alliance has already done in other matters shows that the ability and the money are to be had for such an undertaking. In this direction cotton producers must go to reach the results which Col. Skinner desires to attain.

BRISTOL, TENN., Dec. 13, 1889.

#### Editor Manufacturers' Record:

No town or city in East Tennessee or South West Virginia has made more rapid improvement than Bristol. One year ago it had \$750,000 less in factories, business houses, dwelling houses, school buildings, public buildings of various kinds and all kinds of improvements, than it has now. Some of the finest buildings that adorn the city have been erected in the past year, such as the V. M. C. A. building, the Opera House Harmeling, the Hicks block, the Carter block, and a score of others, which are now under process of erection. But the half has not been told, and it will remain untold till you hear of the great improvements in other directions. It has only been a short time since the town was supplied with water by two different companies, one in Goodson and one in Bristol. It has not been long since the Bristol Street Railway constructed from the Hotel Fairmount to the west end of the city. Bristol has always had the most miserable streets of any town in the South. It seems but a great revolution is taking place even now while this article is being written. Hands have been working on the Virginia side for several weeks removing the old rocks which tried to answer for sidewalks, and are replacing them with bricks, which adds not only to their appearance, but to the comfort of the pedestrian.

A few days ago a notice, signed by B. L. Dulaney, appeared in the Dailey Courier, stating to the citizens of Bristol that the subscription of \$25,000 which they voted October 26, 1889, for the purpose of securing the establishment of an iron furnace, has been accepted by some Northern capitalists and that the furnace was sure to be erected at once. It will have capacity of 150 tons per day, and will employ a large force of hands. It is to be located within two miles of the Thomas House. B. L. Dulaney, W. A. Sparger and others have been instrumental in securing this furnace.

Sullins Female College, which is located on a lovely eminence overlooking the city, has not only undergone improvements to the amount of more than \$10,000, but the President, Rev. L. L. H. Carlock, has announced that another new building, larger than the one now occupied, will be erected at a cost of about \$15,000.

A little more than a year ago Bristol only had two weekly newspapers with a combined circulation of not more than 2,500, but it now has the Daily Courier, which has a fine circulation in East Tennessee and Southwest Virginia.

It is owned and published by John and Charles H. Slack, the former as editor and the latter as business manager, but of the \$750,000 worth of improvements which have been added to the town in the past year I will only make mention of a few of the buildings.

The Bristol-Goodson Water Works cost the two cities not less than \$75,000 and the Bristol Water Works cost \$30,000, which makes a total of \$105,000 which have been expended for water alone.

Bristol Foundry & Car Works cost \$25,000.

Hotel Fairmount, one of the finest and most attractive of summer and winter resorts in the South, was completed during the past summer at a cost of about \$100,000. It is located in the suburbs of the city at the terminus of the street car line.

G. L. Jacobs, of Roanoke, Va., is the manager.

The new Opera House Harmeling, on the Virginia side of Main street, will be completed by the 16th inst. It will be one of the most elegant buildings in the city. It cost \$20,000. Mr. O. J. Taylor will be the manager.

Rev. Z. L. Burson, one of the wealthiest men in the city, has completed a new block on Main street, which cost him \$25,000.

C. B. COOKE.

## Southern Financial News.

### NEW BANKS.

Atlanta, Ga.—The Home Loan & Banking Co. has been organized with J. H. Porter, president, and G. R. De Saussure, cashier; capital \$81,000.

Austin, Texas.—The organization of a bank with \$500,000 capital is being agitated.

Batesburg, S. C.—The Bank of Batesburg has been organized with Henry T. Wright as cashier.

Belton, Texas.—The Citizens' National Bank has been organized with a capital of \$50,000.

Bloomfield, Ky.—The starting of a new bank is being agitated.

Bolton, Miss.—The name of the new bank previously mentioned is the Hindu County Bank; capital stock \$25,000.

Brady, Texas.—The First National Bank is being organized with E. M. Longcoat, president, and M. S. Woods, cashier.

Camden, Tenn.—The Camden Bank & Trust Co., previously mentioned, has been organized with J. H. Farmer as president; capital \$30,000.

Chattanooga, Tenn.—The Continental Bank, previously mentioned, has been organized with a capital stock of \$200,000.

Chattanooga, Tenn.—The Chattanooga Investment, Loan & Banking Co. has been organized with J. T. Jameson, president; capital \$100,000.

Covington, Ky.—The Citizens & Farmers' Bank is being organized by J. K. Stone, P. B. Spence and others.

Covington, Tenn.—The Farmers & Merchants' Bank contemplates increasing its capital to \$50,000.

Dallas, Texas.—The National Exchange Bank has been organized with R. C. Ayers, assistant cashier.

Flaton, Texas.—G. G. Moore is organizing a national bank.

Fort Payne, Ala.—The Rice Investment Co. has been organized with W. P. Rice, president, and G. E. Smalley, secretary and treasurer; capital \$250,000.

Greenville, Texas.—The First National Bank will increase its capital to \$250,000, and the Greenville National Bank, it is stated, to \$225,000.

Greenville, Texas.—The Farmers' & Merchants' National Bank, previously mentioned, has been organized with B. F. Orr, president; capital \$150,000.

Greenville, Tenn.—The First National Bank has been organized with John M. Brabson as president; capital stock \$50,000.

Indianola, Miss.—A bank is being organized.

Knoxville, Tenn.—It is reported that J. R. & J. D. McCallum will organize a private bank with a capital of about \$50,000.

Madisonville, Tenn.—The Kingston Bank & Trust Co. has been organized with Hugh Martin as president; capital \$50,000.

Manchester, Tenn.—It is reported that a private bank will be opened by J. E. Thompson and J. G. Wilkinson.

Middlesborough, Ky.—The First National Bank has been organized with M. C. Alford, president; A. A. Arthur, vice-president; D. F. Frazer, cashier. Capital stock is \$100,000. Bank of J. L. Bird will be changed to a State bank January 1, and will have a capital stock of \$50,000.

New Martinsville, W. Va.—A bank is to be established with a capital of \$25,000.

Norfolk, Va.—The Citizens' Bank has doubled its capital, making \$200,000.

Richlands, Va.—It is reported that the Clinch Valley Coal & Iron Co., of Tazewell, will organize a bank.

Richmond, Va.—A bill has been introduced into the legislature to incorporate the Virginia Mercantile & Safe Deposit Co. with a capital stock of \$100,000. J. T. Ellyson, Charles R. Skinner and others are the incorporators.

Richmond, Va.—The banks of Richmond have organized a clearing-house association.

Starkville, Miss.—The People's Savings Bank is the name of the bank previously mentioned as organized.

Tallahassee, Fla.—The State Savings Bank has been organized with Edward Lewis as president and C. J. M. Shine, cashier; capital \$20,000.

Washington, D. C.—Application has been made by John T. Leuman, Wm. A. Gordon and others

for the incorporation of the Washington Safe Deposit, Storage & Trust Co.; capital stock \$400,000.

Wichita Falls, Texas.—Another national bank has been organized.

Atlanta, Ga.—The Merchants & Mechanics' Banking & Loan Co. will increase their capital to \$250,000.

Baltimore, Md.—The Bank of Commerce is preparing to become a national bank.

Durham, N. C.—The Bank of Durham will shortly pay a dividend of 10 per cent.

El Paso, Texas.—An election will be held to ratify the proposal to issue \$30,000 of bonds for schools, \$20,000 for funding city's indebtedness, and \$75,000 for purchasing or erecting water works.

Fairbanks & Co., of Denison, Texas, have established an insurance and loan department to their real estate business.

It is reported that the St. Louis, Arkansas & Texas Railway Co. will issue a four per cent. mortgage for \$20,000,000.

Jacksonville, Fla.—The proposition previously mentioned to issue bonds to the amount of \$750,000 has been defeated.

Louisville, Ky.—The Southern Exposition Co. has declared a 21 per cent. dividend on bonds and interest to Sept. 1, 1887. Dividends payable after Dec. 17, 1889.

Macon, Ga.—The Southwestern Railroad Co. has declared a dividend of \$1.50 per share.

Palestine, Texas.—The committee on sewerage has recommended that \$47,000 of bonds be issued for the construction of a sewerage system.

The Northern Central Railroad Co. has declared a semi-annual dividend of five per cent. on the capital stock.

Wheeling, W. Va.—The Wheeling Oil Co. has declared a dividend of 12 per cent. on its operations during November.

## Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, Dec. 18, 1889.

	BID.	ASKED.
U. S. 4½'s, C.	104½	104¾
Virginia 3's, new	67½	68½
Ga. Car. & N. 5's	104	104½
Wil. & Wel. 5's	110½	111½
W. Col. & Aug. 6's	115½	116½
Ohio & M., 1st S. Div. 7's	111½	112
Atlanta & Char. 1st 7's	120½	121½
Atlanta & Char. income 6's	104½	107
Va. Midland, ad. 6's	117	117
Va. Midland, 3d, 5-6's	111	111
Va. Midland, 3d, 5's	109	109½
West Va. Central 1st 6's	110½	111
Cape Fear & Y. Valley 6's, A.	103½	103½
Cape Fear & Y. Valley 6's, B.	101½	101½

## STATEMENT OF THE MERCHANTS NATIONAL BANK OF BALTIMORE.

STATE OF MARYLAND, DECEMBER 11, 1889.

### RESOURCES.

Loans and discounts	\$3,320,582.61
Overdrafts unsecured	1,528.57
U. States bonds to secure circulation	50,000.00
United States bonds to secure deposits	350,000.00
Securities	3,193.00
Due from approved reserve agents	337,058.45
Due from other national banks	228,721.10
Due from State banks and bankers	32,282.40
Banking-house	50,000.00
Current expenses	16,406.74
Checks and other cash items	9,010.27
Exchanges for clearing-house	154,777.62
Bills of other banks	3,550.00
Nickels and cents	3,317.92
Specie	450,665.00
Legal-tender notes	141,000.00
United States certificates of deposit for legal tenders	40,000.00
Redemption fund with United States treasurer (5 per cent. of circulation)	2,250.00
Total	\$5,194,152.70

### LIABILITIES.

Capital stock paid in	\$1,500,000.00
Surplus fund	\$400,000.00
Undivided profits	181,276.09
National bank notes outstanding	584,276.09
Dividends unpaid	45,000.00
Individual deposits subject to check	1,967,434.17
Demand certificates of deposit	678.33
Certified checks	7,133.00
Cashier's checks outstanding	83,000.00
United States deposits	389,987.40
Due to other nat'l banks	516,385.66
Due to State banks and bankers	102,801.34
Total	\$5,194,152.70

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**Richmond Stock Exchange**  
**Quotations.**

Reported by JOHN L. WILLIAMS & SON, Bankers, Richmond.

RICHMOND, VA., Dec. 17, 1889.

	BID.	ASKED.
North Carolina 4's, 1910.....	96 1/2	98 1/2
North Carolina 6's, 1919.....	123	125
Virginia New 3's, 1932.....	67 1/2	68 1/2
Lynchburg, Va., 5's, 1915.....	103 1/2	104 1/2
Petersburg, Va., 5's, 1918.....	103 1/2	104 1/2
Norfolk, Va., 5's, 1911.....	104	105
Richmond, Va., 5's, 1922.....	113	116
Atlanta & Charlotte Ry., 1st 7's, 1907.....	121	122
Atlanta & Charlotte G'd 6's, 1900.....	104	105
Char., Col. & Aug. R.R. Gen. 6's, 1932.....	108 1/2	109
Georgia Pacific Ry., 1st 6's, 1922.....	113 1/2	114 1/2
Georgia Pacific 2d 5's, 1923.....	80 1/2	81 1/2
Ga. Pacific Income, 5's.....	31	32
Petersburg Railroad Class A 5's, 1926.....	106	108
Petersburg Railroad Class B 6's, 1926.....	106	108
Rich. & Danville R. R. Gold 6's, 1915.....	118	120
West. N. Car. R. R. Gen. 6's, 1914.....	95	98
Northwestern N. Car. R. R. 1st 6's.....	101	102
Atlanta & Charlotte R. R. Stock.....	85 1/2	86 1/2
North Carolina Railroad Stock.....	101	104
R. F. & Pot. R.R. Div'd Obligations.....	110	112 1/2
Virginia Midland Railway Stock.....	37	40
Sloss Iron & Steel Co. Stock.....	59	61
Sloss Iron & Steel Co. 1st 6's.....	94	95
Sloss Iron & Steel Co. 2d 6's.....	72 1/2	73 1/2

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Selling.		Commercial.
60 days.....	480 1/2	479 1/2 @ 480
3 days.....	485 1/2	
Francs.—		
Selling.		Commercial.
60 days.....	521 1/2	520 1/2 @ 525
3 days.....	518 1/2	
Reichmarks.—		
Selling.		Commercial.
60 days.....	94 1/2	93 1/2
3 days.....	95 1/2	94 1/2
Gulden.—		
Selling.		Commercial.
60 days.....	40 1/2	39 1/2
3 days.....	40 1/2	39 1/2

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\*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

The Union Shuttle Co., of Lawrence, Mass., contemplates, it is reported, moving its works to some point in the South.

## ALABAMA.

Alabama.—Land.—A London (Eng.) syndicate has, it is reported, purchased 750,000 acres of land in Alabama and West Florida at \$10 per acre, through W. J. Vankirk, of Pensacola, Fla.

Anniston—Bloomery.—It is stated that arrangements are being made to put the Anniston Bloomery in operation.

Anniston—Rolling Mill.—It is stated that the \$100,000 stock company previously reported as to build a rolling mill will be organized with Robert Frazier, of Richmond, Va., as president, and J. S. Mooring, secretary.

Behrmann—Planing Mill and Dry-kiln. The Scotch Lumber Co. is reported as to add a planing mill and dry-kiln to its lumber mill.

Benton—Bridges.—The Western Railway of Alabama (office, Montgomery) has commenced the construction of an iron bridge across Big Swamp creek and another across Old Town creek. The Atlanta Bridge Co., of Atlanta, Ga., has the contract.

Bessemer—Iron Furnaces.—The De Bardeleben Coal & Iron Co., operating two coke iron furnaces and building two more; the Bessemer Iron & Steel Co., about completing two coke iron furnaces, and the Little Belle Iron Co., about completing one charcoal iron furnace, lately mentioned as to meet to consider a consolidation, have consolidated and been incorporated as the De Bardeleben Coal & Iron Co. with a capital stock of \$10,000,000. The company has a coal output of 5,000 tons daily and a furnace capacity of 800 tons daily. Henry F. De Bardeleben is president.

Bessemer—Coal Mines.—The De Bardeleben Coal & Iron Co., of Bessemer, is opening new coal mines at Sumpter, near Bessemer. Davis & Belshaw have the contract for sinking the shafts. Two 50 horse-power engines and boilers have been placed in position, and the company expects to turn out 500 tons of coal per day.

Bessemer—Rolling Mill.—The Bessemer Rolling Mill Co. will, it is rumored, enlarge its rolling mill.

Bessemer—Iron Furnace.—The De Bardeleben Coal & Iron Co. has blown out its Queen Anne iron furnace for repairs.

Bessemer—Water Supply.—The Bessemer Land & Improvement Co. has purchased the Prince's spring and the other springs surrounding it for use when additional water supply is required.

Birmingham—Bridge.—City Engineer Carter is preparing plans for a new bridge across 21st street.

Birmingham—Oil Refinery.—It is reported that a Boston party is organizing a stock company to establish an oil refinery.

Birmingham—Water Works, etc.—The Birmingham-Ensley Land & Improvement Co. will issue \$30,000 of bonds to enlarge its water works and improve its property.

Birmingham—Knitting Factory.—It is reported that Birmingham parties will build a knitting factory at Velma Station on the East Birmingham Dummy Line.

Birmingham—Saw Mill.—Dean & King will put a new boiler in their saw mill at King's Station, near Birmingham, reported in this issue as damaged by a boiler explosion.

Birmingham—Steel Plant.—The Henderson Steel & Manufacturing Co. has decided to build the blooming train previously reported in connection with its steel plant mentioned in last issue.

Birmingham—Publishing.—Jere Dennis will publish a newspaper.

Birmingham—New Town.—The New Iberia Land Co. is to be incorporated to build a new town near Birmingham to be called New Iberia.

Bluffton—Sewerage System.—J. D. Hunter, of Anniston, is preparing plans for a sewerage system.

Bridgeport—Machine Works.—It is reported works for the manufacture of saw mill machinery will be established. The Bridgeport Land & Improvement Co. can give information.

Bridgeport—Grain Elevator.—The Nashville, Chattanooga & St. Louis Railroad Co. (office, Nashville, Tenn.) will move, it is said, its grain elevator to the Bridgeport side of the river.

Bridgeport—Cotton Mill.—The Bridgeport Land & Improvement Co. will, it is stated, organize a \$400,000 stock company to build the cotton mill mentioned in last issue.

Columbia—Brick-yard.—James Martin contemplates starting a brick-yard.

Columbiana—Charcoal Ovens.—J. S. D. Loché is building a number of coke ovens near Columbiana.

Decatur.—W. W. Hedges states that the report that he and others would build a flour mill, referred to in last issue, is untrue.

Decatur—Ship-yard and Saw Mill.—The Decatur Lumber Co., previously reported as enlarging its mill, will, it is stated, put in a band saw and other machinery, and build a ship-yard if it secures a side track from the railroad to its plant.

Decatur—Iron Furnace, &c.—The Decatur Iron, Land & Lumber Co. is the name of the company lately reported as organized by E. C. Gordon to operate the iron furnace and charcoal works of the Decatur Land, Improvement & Furnace Co.

Florence—Plow Factory.—J. D. Mills, of Cincinnati, Ohio, contemplates locating in Florence next summer a factory for the manufacture of his patent plow and planter.

Florence—Cotton Mill.—The cotton mill lately reported as to be built by the Florence Cotton Mills Co. will contain 53,000 spindles. Contracts for all the machinery have been let. The mill is expected to be in operation about July, 1890.

Fort Payne—Lime Works.—J. M. Stoddard and J. K. Carr have organized the Fort Payne Lime Co. to operate the lime works of the former. A new kiln will be built and the capacity of the works doubled.

Fort Payne—Sewerage System.—J. D. Hunter, of Anniston, is preparing plans for the sewerage system lately mentioned.

Fort Payne—Lake.—The Crystal Lake Land Co. is receiving bids for the construction of an artificial lake.

Gadsden—Distillery.—Hughes & Co., lately reported as to establish a distillery, have organized the Etowah Distilling Co.

Greenville—Canning Factory.—D. G. Dunklin contemplates erecting a canning factory.\*

Helena—Coal Mines.—The De Bardeleben Coal & Iron Co. has leased, it is reported, coal land from A. Griffin, and will open new mines.

Mobile—Dry Dock.—The Mobile Dry Dock Co. has been organized by J. C. Rich, J. C. Clarke, A. C. Danner, R. K. Warren and others to build a dry dock at an estimated cost of \$150,000.

Mobile—Saw Mill and Box Factory.—William Turner & Co. intend putting veneer machinery in their saw mill and box factory.

Montgomery—Electric-light Plant.—The Ball Electric Light & Power Co. contemplates erecting an electric-light plant.

New Decatur—Furniture Factory.—Northern parties have been prospecting with a view to establishing a furniture and school-desk factory.

New Decatur—Gas Works.—The Decatur Gas Co., of Decatur, will extend its mains in New Decatur.

Nottingham—Planing Mill.—E. S. Blackman, mentioned in last issue, is erecting a planing mill, two stories, 32x50 feet, and has purchased machinery.

Sheffield—Machine Shops.—The Sheffield Machine Co. has let contract for constructing the machine shops for the Memphis & Charleston Railroad, previously reported, to Stevenson & Co., of Knoxville, Tenn.

Springville—Iron Mines.—The Birmingham Mining & Manufacturing Co., of Birmingham, is opening iron mines on its property near Springville. It expects to mine 200 tons daily.

Troy—Water Works.—The city council has granted a franchise to J. M. Langley & Co. to build the water works previously reported.

Tuscumbia—Sash, Door and Blind Factory.—The Tuscumbia Contracting Co. will erect the sash, door and blind factory reported in last issue.

Waterloo—Wood-working.—The Waterloo Land Mining & Manufacturing Co. has about concluded arrangements to locate a large wood-working enterprise from Pennsylvania at Waterloo, to be run by water power.

## ARKANSAS.

Bentonville—Canning Factory and Evaporator. The Bentonville Canning & Evaporating Co. is reported as to enlarge its factory for next season.

Clarksville—Publishing.—B. Blythe has commenced the publication of the Phonograph.

Conway—Saw Mill.—J. W. Robins will, it is stated, put a new boiler and engine in his saw mill.

Dardanelle—Lumber Mill.—Thomas Cox has put a new planer in his lumber mill.

Harrison—Copper Mines.—The Copper City Mining Co. has been organized with J. B. Hayles, president; A. B. Sloan, of Jasper, vice-president, and F. L. Hamilton, secretary, to develop copper mines.

Helena—Machine Shops.—The Arkansas Midland Railroad Co. will, it is stated, rebuild its machine shops.

Hope—Saw Mill.—Briant Bros. have purchased the saw mill of J. H. Dudley on the St. Louis, Iron Mountain & Southern Railroad.

Little Rock—Saw Mill.—The Anderson Lumber Co. has purchased a saw mill near Little Rock.

Nettleton—Saw Mill.—W. R. Santley & Co. have rebuilt their saw mill mentioned as burned in last issue.

Paragould—Flour Mill.—Eckert Bros. are reported as to build a flour mill.

Pine Bluff—Gin.—E. L. Colburn has rebuilt his cotton gin recently burned.

Pine Bluff—Electric-light Plant.—The Pine Bluff Mill & Elevator Co. will probably put in an electric-light plant to light its flour mill and elevator.\*

Poinsett County—Saw Mill.—W. R. Santley & Co., of Jonesborough, are erecting a saw mill at Furnish Siding.\*

Texarkana—Publishing.—C. J. Holt has commenced the publication of the Post.

Wilmar—Lumber Mill.—The Thornton Lumber Co. will move its mill to Wilmar, and not to Warren, as lately mentioned, and will change its name to the Gates Lumber Co.

## FLORIDA.

Apalachicola—Canning Factory.—Thomas W. Bamberger and Mr. Brewington, of Baltimore, Md., have commenced the erection of the oyster canning factory lately mentioned. It is to be two stories, 25x40 feet.

Barton—Cigar Factory.—Messrs. Freithe & Kolb will start a cigar factory.

Campbell—Perfumery Factory.—E. W. Marshall will move his perfumery factory to Campbell, and not to Kissimmee, as mentioned in last issue.

Fernandina—Foundry and Machine Shop.—The Fernandina Town Co. is making efforts to secure the erection of a foundry and machine shop.

Fernandina—Fibre Factory.—The Loomis Manufacturing Co., previously reported as enlarging its fibre factory, will put in \$35,000 of new machinery.

Green Cove Springs—Brick and Tile Works.—The Clay County Brick & Tile Co., previously reported, is now receiving its machinery.

Jacksonville—Public Improvements.—The city has decided by a popular vote not to issue bonds for the public improvements previously reported.

Jacksonville—Cigar Factory.—H. M. Fritot, reported in last issue as to erect a cigar factory, is only building an addition to present factory.

Ocala—Cigar Factory.—Charles Peyser will, it is reported, start a large cigar factory about January 1.

Osceola—Publishing.—D. H. James has commenced the publication of the News.

Palatka—Lumber Mill.—Butler & Riles will put shingle machinery in their lumber mill.

Pensacola—Tannery.—It is stated that W. A. Blount is interested in the project to establish the tannery lately mentioned.

Pensacola.—The Perdido Land Co. has been incorporated with A. C. Blount, Jr., president, and R. M. Cary, Jr., secretary, to deal in real estate. The capital stock authorized is \$250,000.

Pensacola—Marine Railway.—The Pensacola Marine Railway Co., previously reported as building a marine railway to dock 1,000-ton vessels, will, it is reported, probably build another of double this capacity. Samuel P. Hartt is superintendent of construction.

Starke—Cabinet Shop.—W. H. Taylor states he will not enlarge his cabinet shop at present, as lately mentioned.

Tampa—Cigar Factory.—Sanchez & Haya contemplates enlarging their cigar factory.

Tampa—Water Works.—The Tampa Water Works Co., previously reported as to change the location of its machinery, is building a reservoir at Magbee Spring and will operate two pumps there.

Tampa—Timber and Phosphate Lands.—The Chicago syndicate formed by S. A. Jones, mentioned in last issue, has purchased 120,000 acres of timber and phosphate lands.

## GEORGIA.

Albany—Machine Shop.—H. E. Wardwell contemplates starting a machine shop.

Atlanta—Gas Works.—The Gate City Gas Light Co., previously mentioned as to extend its mains and improve its works, will shortly commence work. It is stated that \$235,000 will be expended in putting down larger mains and extending present ones.

Bainbridge—Barrel Factory.—A Florida party has purchased a site and will erect a barrel factory.

Brunswick.—The Brunswick Board of Trade has been incorporated by C. Downing, J. M. Dexter, A. J. Crovatt and others.

Brunswick—Foundry and Machine Shops, &c. T. W. Dexter, reported in last issue as organizing a company to establish a foundry, machine and blacksmith shops, has, with J. M. Jardine and W. Dunham, incorporated the Brunswick Foundry, Machine & Manufacturing Co. for the manufacture of tools, machinery, locomotives, etc., and the construction and operation of a marine railway or dry dock. The capital stock is \$50,000.

Brunswick—Saw Mill.—The Crescent Lumber Co. will, it is stated, erect a saw mill on the Georgia Southern & Florida Railroad.

Brunswick—Wood-working Factory.—Valentine & Brown contemplates enlarging their wood-working factory.

Cartersville—Ferro-Manganese Furnace.—Efforts are being made to secure the building of a ferro-manganese furnace.

Cartersville—Silver Mine.—J. W. Rich, J. P. Jones and others have leased and are developing silver lands.

Cement—Cement Works.—The Howard Hydraulic Cement Co. will put a new set of boilers and a new engine in its cement works.

Cochran.—Parrott, Cheeves & West, reported in last issue as purchasing the saw mill of Carnes & Mullis, have incorporated as the Parrott Lumber Co. and will add a planing mill and dry-kilns.

Columbus—Plow Factory.—The Columbus Iron Works will enlarge its plow factory.

Conyers—Wheel Factory.—H. D. Terrell is considering the manufacture of his patent buggy wheel in Conyers.

Cordele—Saw Mill.—W. S. Scoville is putting new machinery in his saw mill.

Cordele—Broom Factory.—A broom factory will probably be started.

Cordele—Paint Works.—The erection of paint works is projected.

Darien—Lumber Mill, &c.—The Sapelo Land & Lumber Co. has been incorporated by Joseph Hilton, N. W. Dodge, J. P. Gibson and others for the manufacture and sale of lumber, naval stores, etc. The capital stock is \$40,000.

Dover—Saw Mill.—John Alderman will erect a saw mill on the Dover & Statesboro Railroad near Mill creek.

Gainesville—Foundry and Machine Shop.—W. A. Palmer, of Anniston, Ala., is reported as negotiating to purchase the foundry and machine shop of Butler & Mount.

Gainesville—Gold Mining and Tunnel.—The Etowah Gold Mining Co. has been organized with T. J. Cheney, president, and F. C. Exter, secretary, both of St. Louis, Mo. It has purchased the Castleberry property containing 640 acres on the Etowah river, 20 miles northwest of Gainesville. The company proposes to cut a tunnel 1,500 feet to change the course of the river, at an estimated cost of \$15,000, in order to work the gold ore in its bed.

Macon—Match Factory, &c.—The stock company previously reported as organized to start a match factory has been incorporated as the Empire Match Co. by Albert Gibian, H. T. Johnson, John Farrar and others. The company also contemplates making paper boxes, brooms, wood and willow ware and toothpicks. The capital stock is to be \$25,000.

Perry—Chair Factory.—The erection of a chair factory is projected.

Resaca—Flour Mill.—W. L. Fain will probably put corn meal machinery in his flour mill.



Richland—Land.—The Americus Investment Co., of Americus, lately reported as purchasing land from Major Myers, is negotiating, it is stated, to purchase additional land from N. C. Alston, Jr.

Savannah—Gas Works.—The Brush Electric Light & Power Co. contemplates manufacturing the Westinghouse fuel gas.

Savannah—Medicine Factory.—W. M. Cleveland, R. V. Nottingham, C. Edmonston and others have incorporated the Antimigraine Co. to manufacture medicine. The capital stock will be \$10,000.

Tallapoosa—Foundry and Machine Shops.—W. G. Sutherland, of Edmore, Mich., and George C. Blackman, of Howell, Mich., reported in last issue as to establish a foundry and machine shops, will operate same as the Tallapoosa Foundry & Machine Works.

Tallapoosa—Distillery.—A distillery has been started recently.

Tallapoosa—Knitting Mill.—Alvin Porter is reported as to establish a knitting mill with a capital stock of \$50,000. G. F. Quackinbush & Co. can give particulars.

Trenton—New Town.—The New England Land, Coal, Iron & Manufacturing Co., previously reported as to build a town to be called New England City near Trenton, has amended its charter, changing its name to the New England Co.

#### KENTUCKY.

Addison—Flour Mill.—L. D. Addison, M. Hamman and others are organizing a stock company to build a flour mill.

Arlington—Flour Mill.—J. Fleigle & Sons contemplate putting new machinery in their flour mill.

Ashland—Iron Furnace.—The Norton Iron Works has recently put in blast its iron furnace, after relining.

Barbourville—Bridge.—The bridge commissioners of Knox county will receive proposals until January 27, 1890, for constructing the iron bridge lately mentioned across the Cumberland river. It is to be 18 feet wide and in one span of 240 feet.

Beattyville—Bridge.—It is proposed to build a new bridge across Crystal creek. The mayor can give information.

Breathitt County—Coal and Timber Lands.—I. T. West, of Frankfort, has purchased 15,700 acres of coal and timber lands for \$75,000.

Catlettsburg—Electric-light Plant.—An electric-light plant will probably be erected. The mayor can give information.

Catlettsburg—Machine Shop.—John Grant intends putting in a lathe and drill press.

Covington—Asphalt Mining.—The Natural Asphalt Mining Co. has been incorporated by Philip Carey, George S. Bailey, G. M. Clark and others to mine asphalt. The capital stock authorized is \$1,000,000.

Dayton—Cordage Factory.—George Anderson has, it is reported, contracted to erect buildings for the Victory Cordage Factory.

Earlington—Saw Mill.—W. H. Lynn will move his saw mill from Madisonville to Earlington.

Glasgow—Oil Refinery.—The Kentucky Southern Oil & Gas Co., of Louisville, has commenced the erection of the oil mill near Glasgow, as lately mentioned. The plant will have a capacity of 1,500 barrels of refined oil per week.

Hampton—Grist Mill.—William Hatfield has started a grist mill.

Louisville—Fire-brick Works.—K. B. Grahn & Co., reported in last issue as commencing the erection of fire-brick works, have organized as the Louisville Fire-brick Co.

Louisville—Publishing.—The Medical Progress Co. has been incorporated by D. S. Reynolds, L. S. McMurty, J. F. Barbour and others to publish a medical journal.

Louisville—Rolling Mill.—Berry Coleman has submitted a plan to the Commercial Club for the establishment of a rolling mill.

Louisville—Buggy and Stove Factories.—The Vance Land Co. states it is negotiating for the location of a buggy factory and a large stove factory on its property.

Lucas—Handle Factory.—An axe-handle factory will be started.

Madisonville—Flour Mill.—Wyatt Bros. have purchased the Madisonville Roller Mill.

Middlesborough—Rod Mill, Sheet-Iron Mill and Nail Mill.—The contract mentioned last week as signed by the Middlesborough Town Co. for the establishment of a rod mill, sheet-iron mill and nail mill, specifies, it is reported, that ground shall be broken for the building of same by January 1, 1890.

Middlesborough—Furniture Factory.—The Middlesborough Furniture Co., with a capital stock of \$150,000, will erect the furniture factory reported in last issue.

Middlesborough—Bent Wood Works.—Bent wood works will, it is stated, be established by a \$75,000 stock company. A. A. Arthur can give particulars.

Middlesborough—Coffin Factory.—A coffin factory will, it is reported, be erected by a \$50,000 stock company. A. A. Arthur can give particulars.

Middlesborough—Land.—Parties have purchased 120 acres of land from D. G. Colson for \$84,000, and organized as the West End Land Co. with O. W. Davis, Jr., president; H. P. Wyman, vice-president, and F. Frazee, secretary.

Middlesborough—Coal and Timber Land.—F. A. Hull, of Danbury, Conn., has purchased 11,000 acres of coal and timber land from B. E. Talbutt.

Middlesborough—Wire Works.—Negotiations are pending with the Middlesborough Town Co., it is stated, for the locating of galvanized wire works in Middlesborough.

Middlesborough—Tannery.—Hall & Vaughn will shortly commence work on the tannery previously reported.

Paris—Electric-light Plant.—It is stated that the company lately mentioned as to be probably organized to erect an electric-light plant, has been organized with a capital stock of \$50,000.

Paris—Gas Works.—The Paris Gas Co. contemplates erecting an additional holder at its gas works in the spring.

Russell—Stove Foundry.—George Harvey & Sons will move their stove foundry from Greenup to Russell about February 1, 1890.

Russell County—Canning Factories.—It is reported that canning factories will be started at the Rhineland and Hanover German colonies.

St. Helens—Telephone Line.—The St. Helens Telephone Co. has been incorporated by C. B. Lowry, S. P. Stamper and J. M. Sharpe to construct a telephone line from St. Helens to Beattyville.

Vanceburg—Land.—Shudbalt & Kendal are the purchasers of the Boon furnace tract of land reported in last issue as sold.

#### LOUISIANA.

Clio—Saw Mill.—C. H. Adams, of Chicago, Ill.; H. I. Kimball, of New York, and others, owners of 20,000 acres of timber land in Livingston parish, contemplate erecting a large saw mill on Blind river.

Delta—Levee Works.—Contract for repairing and raising the levees along the front of Madison and part of East Carroll parish has been let to John Scott & Son at \$40,000. The work is estimated at 254,000 cubic yards.

Donaldsonville—Brick-yard.—Cire & Enault intend adding a brick machine to their brick-yard, to be operated by horse-power.

New Orleans—Ice Factory.—The Consumers' Ice Co. will erect another ice factory.

New Orleans—Canal.—The New Basin Canal is to be extended.

New Orleans.—The American White Lead & Color Co., previously reported as to meet to consider the increase of its capital stock, has amended charter, increasing same from \$15,000 to \$35,000.

Shreveport—Land.—The Shreveport Railway & Land Improvement Co. has purchased 80 acres of land for \$9,500, and will convert part of it into a park and the remainder lay off in residence lots.

#### MARYLAND.

Baltimore—Factory.—The Baltimore Specialty Co. has been incorporated by J. P. Poullain, Geo. Savage, A. H. Taylor and others for the purpose of manufacturing mechanical inventions, etc.

Baltimore—Shirt Factory.—The Chesapeake Shirt Co., reported in last issue as to put in a 75 horse-power boiler, will move its factory to larger quarters and put in also a 30 horse-power engine and additional sewing machines. 500 hands will be employed. Machinery has been ordered.

Bloomington—Coal Mine.—W. L. Rawlings and G. C. Pattison have leased the coal mine of the Piedmont Coal & Iron Co., and will continue the development of same.

Cumberland—Flour Mill.—L. D. Rorher contemplates enlarging his flour mill.

Frostburg—Electric-light Plant.—The Frostburg Gas Light Co. contemplates putting in an electric-light plant for arc and incandescent lighting.

Gamber—Paper Mill.—It is reported that parties are remodeling and will put in operation the Ivy Paper Mill.

Snow Hill—Electric-light Plant.—W. S. Wilson, C. J. Furnell and others, previously reported as purchasing and to enlarge the electric-light plant, have organized as the Snow Hill Electric Light & Power Co., with J. P. Moore as president.

Washington, D. C.—Brass Foundry.—Robert Leitch & Sons are enlarging their brass foundry.

#### MISSISSIPPI.

Jackson—Land.—The Davis Land Co. has decided to increase its capital stock from \$100,000 to \$250,000.

Rial's—Saw Mill.—C. Burns has purchased a new saw mill.

Tunica County—Saw and Planing Mill, etc.—Parties have purchased from the McGinness Land Co. 53,000 acres of timber land and intend, it is stated, erecting a saw and planing mill,

shingle and lath mill and sash, door and blind factory.

#### NORTH CAROLINA.

Concord—Iron Works.—The Cabarrus Wood & Iron Co. is the name of the company previously reported as organized to manufacture from wood and iron. It has completed its factory and will probably enlarge same.

Edenton—Electric-light Plant.—An electric-light plant will probably be erected. The mayor can give particulars.

Elizabeth City—Electric-light Plant.—The Elizabeth City Electric-light & Power Co., mentioned in last issue, will enlarge plant to double its capacity.

Greensboro—Wagon Factory.—A stock company is being organized to establish the wagon, carriage and cart factory previously reported. The capital stock is to be \$100,000. The company will occupy McMahon's Spoke Factory.

Greensboro—Car Works.—A site for new car works has been purchased, it is said.

Greensboro—Foundry and Machine Shop.—The Eagle Foundry Co., previously mentioned as erecting a new building for its foundry and machine shop, will put in some new machinery.\*

Lincolnton—Printing Office.—Samuel Lander is erecting a brick building in which to conduct a steam printing business.

Maiden—Iron Mines.—Mr. Cole, of Pittsburgh, Pa., representing a company, has leased, it is reported, the Forney iron ore mine near Maiden, and the Kale mine near Catawba, and will develop.

Oxford—Cigarette Factory.—The Farmers' Alliance may establish a cigarette factory.

Randleman—Publishing.—J. W. Lee has decided not to publish a newspaper, as lately mentioned.

Reidsville—Flour and Saw Mills.—J. H. Walker & Co. will put two new boilers in their flour and saw mills.

Rockingham—Cotton Mill.—The Ledbetter Manufacturing Co. contemplates, it is reported, putting 1,000 additional spindles in its cotton mill.

Sylva—Kaolin Mine.—The Equitable Manufacturing Co. is opening a new kaolin mine.

Uwharrie—Gold Mine.—A Northern party has purchased gold lands from Tebe Saunders for \$10,000.

#### SOUTH CAROLINA.

Blacksburg—Cotton Mill.—The Cherokee Falls Manufacturing Co. has recently put some new machinery in its cotton mill.

Bonneau's Depot—Saw Mill.—Weber & Davis will, it is stated, erect a new saw mill.

Chesterfield County—Mining.—New machinery will be placed in the Brewer mine.

Columbia—Pottery, &c.—The South Carolina Mining & Manufacturing Co. has been incorporated by J. C. Murrant, of Lebanon, Pa.; J. S. McNulty, of Yorkville; J. M. English and others to develop kaolin mines and manufacture brick, pottery, &c. The capital stock authorized is \$100,000. The company owns, it is stated, between 10,000 and 12,000 acres of kaolin lands in Richland county.

Columbia—Phosphate Mines.—A bill has been introduced in the State Senate to authorize the sale of the phosphate beds belonging to the State for a sum not less than \$7,000,000.

Darlington.—A board of trade has been organized with E. K. Dargan, president; J. G. McCall, vice-president, and H. N. Wilcox, secretary.

Ridgeville—Lumber Mill.—Norman Moseley will put a lath machine and edger in his lumber mill.

Spartanburg—Rope and Twine Factory.—The Beaumont Manufacturing Co. has been incorporated by J. H. Sloan, J. B. Cleveland, W. T. Bryant and others for the manufacture of twine, rope and other articles of cotton, wool, hemp and jute. The capital stock is \$30,000.

Yorkville—Pottery.—W. G. Shillinglaw contemplates organizing a stock company to develop clay mines and establish a pottery.

#### TENNESSEE.

Bacchus—Saw Mill.—J. D. Mayes has purchased an outfit for saw mill.

Chattanooga—Iron Works.—Walsh & Weidner will probably enlarge their iron works.

Chattanooga—Barrel Factory.—The Tredegar Barrel Factory is to be moved to another site.

Chattanooga—Organ Factory.—Charles H. Muenger, of Geneva, Ohio, will, it is stated, move his organ factory to East Chattanooga if given sufficient inducement.

Chattanooga—Plow Factory.—The Chattanooga Plow Co. is putting new boilers and engine in its plow factory.

Chattanooga—New Town.—The Chattanooga Investment, Loan & Banking Co., reported in last issue as incorporated, will act in the capacity of general manager for the East Chattanooga Land Co., which is building an industrial town at East Chattanooga, as previously reported.

Chattanooga—Saw Mill.—David Gibson, previously reported as establishing a plow-handle factory, is erecting a saw mill.

Chattanooga—Box and Dish Factory.—G. T. Benjamin, J. E. Tueller, E. E. Everett and others will charter the Chattanooga Box & Butter Dish Co. to erect a box and butter-dish factory at East Chattanooga. The capital stock is to be \$50,000.

Chattanooga—Furniture Factory.—Haynes, Spencer & Co., of Richmond, Ind., will, it is stated, move their church and school furniture factory to East Chattanooga.

Cleveland—Chair Factory.—The Cleveland Chair Factory Co. has decided to rebuild its chair factory burned some time ago.

Dayton—Saw and Shingle Mill.—H. L. Reynolds, reported in last issue as erecting a saw mill, will also erect another and add shingle machinery.\*

Emory Gap—Coal Lands.—The East Tennessee Land Co., of 96 Broadway, New York, N. Y., has purchased 15,000 acres of coal lands from the Coal Creek Mining & Manufacturing Co.

Fayetteville—Planing Mill.—J. L. Waggoner, lately mentioned as contemplating putting new machinery in his planing mill, will put in a hand saw, carving, shaper, mortising and other machines.\*

Johnson City—Water Works.—Contract to supply the city with water has been let to R. A. Johnson, of 41 Broadway, New York city, and the construction of the water works previously reported will commence in 90 days.

Johnson City—Iron Furnace.—General J. T. Wilder reports that all the money has been secured for the building of the iron furnace previously reported.

Knoxville—Bridges.—The construction of a bridge across West Fifth avenue and another parallel to McGhee street is proposed. The mayor can give information.

Knoxville—Coal Mines and Coke Ovens.—John and R. L. Ralston, O. W. Davis, Jr., Charles Seymour and C. K. Adams have incorporated the Mingo Mountain Coal & Coke Co. for the mining of coal and manufacturing coke.

Knoxville—Furniture Factory.—A stock company will probably be organized to put the Repass Furniture Factory in operation.

Knoxville—Ice Factory.—The Knoxville Ice Co. will, it is reported, put an ice machine of 15 tons capacity and an 80 horse-power boiler in its ice factory about January 1.

Knoxville—Furniture Factory.—The East Tennessee Furniture Co. has put in a new planer and other machinery.

Lane—Saw Mill.—Callan & Co. are erecting a saw mill near Lane's Ferry, on the Obion river.

Loudon—Flour Mill.—The Farmers' Alliance will, it is reported, build a 500-barrel flour mill.

Memphis—Publishing.—J. M. Keating and others have commenced the publication of the Commercial.

Memphis—Coffin Factory.—A \$50,000 stock company is reported as organized to erect a coffin factory.

Millington—Pump Works.—The Tennessee Pump Works will put in some new machinery.

Mossy Creek—Flour Mill.—J. E. Clark, reported in last issue as improving the Ashwood flour mill, contemplates moving it to the railroad depot, so as to utilize a water-power 2 miles from the depot, transmitting the power by electricity.\*

Mossy Creek—Machine Works.—G. W. Bollinger, of Jonesboro, will move his machine works to Mossy Creek.\*

Nashville—Land.—The West End Land Co., reported in last issue as incorporated, has purchased 400 acres of land adjoining Nashville and will lay off in residence lots.

Obion—Saw Mill.—L. V. Boyle & Co. are putting additional machinery in their saw mill.

Obion—Saw Mill.—John Nogue will erect a new saw mill about January 1.

Obion—Saw Mill.—Halstead & Price will shortly start a new saw mill near Obion.

Obion—Flour Mill.—It is probable that efforts will be made to build a roller flour mill.

Paint Rock—Coal Mines and Coke Ovens.—The Paint Rock Coal & Coke Co., previously reported as opening coal mines, expects to mine 600 tons per day and will build 100 coke ovens.

Powell's Station—Brick Works.—The Knoxville Brick Co. will put a new brick machine in its works and erect a dry-kill.

Pulaski—Flour Mill.—B. F. McGrew is reported as to build a roller flour mill.

Ringgold—Elevator and Flour Mill.—W. P. Hambaugh & Co. have recently put new machinery in their flour mill, and will, it is reported, build a grain elevator next spring.

Rogersville—Flour Mill.—E. M. Spears will build a flour mill.

Sherman Heights—Wagon Factory.—W. A. Woolson has commenced the erection of a wagon factory and repair shop.

South Pittsburg—Pipe Works.—The South Pittsburg Pipe Works has commenced the extension of its works previously reported.

South Pittsburg—Iron Furnaces.—The Tennessee Coal, Iron & Railroad Co. is erecting two large Gordon stoves at its furnaces.



Spring Creek—Distillery.—D. H. & J. D. King will establish a distillery.

Tazewell—Flour Mill.—A \$10,000 stock company is being organized to build the roller flour mill lately mentioned. L. C. Chance can give particulars.

Trenton—Oil Mill.—The Trenton Cotton Seed Oil Mills has repaired and improved its oil mill.

Trenton—Water Works.—The legislature will be petitioned at the next session to authorize the town to issue bonds for the construction of a system of water works. The mayor can give particulars.

Troy—Chair Factory.—It is reported that a stock company is being organized to build a chair factory.

Troy—Saw Mill.—Pyles, Hogue & Co. have, it is reported, enlarged their saw mill.

Union City—Flour and Corn Mill.—The Union City Roller Mill Co. has let contract for a 125-barrel flour meal and a corn mill of 500 bushels daily capacity to the Barnard & Leas Manufacturing Co.

#### TEXAS.

Austin—Marble Works.—A. J. Jernigan has put new machinery in his marble works.

Ballinger—Bridge.—Contract will be let shortly for building an iron bridge across Elm creek near Ballinger.

Bastrop—Bridge.—Contract for building the bridge across the Colorado river, mentioned in last issue, has been let to the Chicago Bridge & Iron Co., of Chicago, Ill., at \$45,000. The bridge will consist of one cantilever span, 312½ feet, and two short spans, 150 feet each, with about 650 feet of wooden approaches.

Baylor County—Land.—M. Lasker and others of Galveston, have purchased 50,000 acres of land in Baylor and Knox counties for \$40,000 and will divide up in small farms.

Belcherville—Mattress Factory.—Scott Bros. have erected a mattress and spring bed factory.

Bonham—Publishing.—The Fannin County Publishing Co. has been incorporated by J. W. Russell, E. J. Allen, G. L. English and others.

Brenham—Ice Factory and Electric-light Plant.—A stock company is being organized to erect the ice factory and cold storage plant mentioned in last issue as to be erected by Adolphus Busch and associates, of St. Louis, Mo. An electric-light plant will also be erected. D. C. Giddings is interested.

Columbus—Grist Mill and Gin.—The Columbus Ginning & Milling Co. expects to put in additional machinery next spring.

Cucero—Oil Mill.—The Buchel Milling Co. is reported as organizing a stock company to build the cotton-seed oil mill lately reported.

Dallas—Brewery.—It is reported that Adolphus Busch and associates, of St. Louis, Mo., contemplate erecting a beer brewery.

Dallas.—The Security Mortgage & Trust Co. has amended its charter, increasing capital stock to \$1,000,000.

Denison—Brewery.—Adolphus Busch and associates, of St. Louis, Mo., have purchased property and will, it is rumored, erect a brewery.

Denison—Chair Factory.—It is stated that the chair factory previously reported is to be moved from Georgetown to Denison and that a \$30,000 stock company has been organized to operate it. The secretary of the Board of Trade can give information.

El Paso—Brewery.—It is reported that Adolphus Busch and associates, of St. Louis, Mo., contemplate the erection of a beer brewery.

El Paso—Water Works.—The city will decide by a popular vote on January 7, 1890, whether or not to issue \$75,000 of bonds to secure a system of water works.

Fort Worth—Artesian Well.—M. G. Ellis is sinking an artesian well in the Ellis addition.

Fort Worth—Printing Office.—E. F. Groene, of Cincinnati, Ohio, previously reported as prospecting with a view to establishing a large printing office, and W. D. Thomsen have moved their printing office from Cincinnati to Fort Worth.

Fort Worth—Wind Mill.—H. L. Lathrop, lately reported as sinking an artesian well, will erect a wind mill to furnish power for pumping.

Fort Worth—Woolen Mill.—It is stated that negotiations have been closed with Indianapolis parties for the erection of the woolen mill lately mentioned. C. W. Post can give particulars.

Fort Worth—Gas Works.—The Fort Worth Gas Co. will, it is stated, change the location of its gas works.

Fort Worth—Woolen Mill.—The Fort Worth Woolen Mills Co., C. W. Post, trustee, binds itself to erect a woolen mill, the main building of which is to be two stories, 150x50 feet, provided a certain number of lots are sold on Alamosa Heights.

Hillsboro—Ice Factory.—The erection of an ice factory is projected. The mayor can give information if anything is done.

Jasper—Water Works.—Water works will be built, it is reported. The mayor can give information.

Laredo—Machine Shops.—A. D. Howland, of Dallas, is reported as to establish shops for the manufacture of wood-working machinery.

Laredo—Shoe Factory and Tannery.—Albert Urbahn, Allen McDonald, A. M. Bruni and others contemplate establishing a \$50,000 tannery.

Laredo—Soap Factory.—The Board of Trade is endeavoring to secure the removal of a large soap factory to Laredo.

Marietta—Canning Factory.—The Marietta Irrigation Co. contemplates erecting a canning factory.

Marlin—Water Works.—William Shelton, mayor, will receive proposals until January 8, 1890, for the construction of the water works previously mentioned.

New Birmingham—Cotton Mill.—It is reported that a cotton mill to employ 400 hands will be erected. E. C. Dickinson can give information.

New Birmingham—Wagon Factory.—The New Birmingham Iron & Land Co. is negotiating to secure the removal to New Birmingham of a wagon factory employing 500 hands. (Reported last week under West Virginia by mistake.)

Palestine—Sewerage System.—The committee on sewerage system has recommended that \$47,000 of bonds be issued to construct same. The mayor can give information.

Paradise—Grist Mill and Gin.—C. M. Faulkner will rebuild his grist mill and cotton gin lately reported as burned.\*

San Antonio—Telegraph Line.—B. F. Yoakum is president, N. Scott vice-president and Reagan Houston secretary of the San Antonio & Aransas Pass Telegraph Co., reported in last issue as incorporated with a capital stock of \$200,000. It has purchased the lines and franchises of the Breckinridge Frontier Telegraph Co. and will extend the lines to Dallas.

Santa Anna—Flour Mill.—Rogan & Lambertson will erect the flour mill lately mentioned.

Sherman—Artesian Well.—Z. P. Dederick and others will sink an artesian well and probably erect a stand-pipe.

Sulkin—Lumber Mill.—Henderson & Kurth will enlarge their lumber mill about January 1.

Tyler—Furniture Factory.—H. C. Havenkott has commenced the erection of a furniture factory.

Tyler—Woodenware Factory.—A company has been organized for the manufacture of woodenware.

Vernon—Artesian Well.—The Vernon Artesian Well & Water Co. will sink the artesian well previously reported. F. K. Richardson, secretary, will receive bids until January 15, 1890.

#### VIRGINIA.

Bales Mills—Saw Mill.—Richer & Co. have recently purchased a saw mill outfit.

Buena Vista—Brick and Terra Cotta Works.—It is stated that brick and terra-cotta works will be established. The Buena Vista Co. can give particulars.

Gordonsville—Flour Mill.—It is reported that a new flour mill will be built. J. R. Gentry can give information.

Huntington—Coal Mines.—W. G. Mason, of Union Mines, will prospect for coal and probably organize a stock company to develop coal lands.

Lexington—Ice Factory.—W. T. Wormeldorf has, it is reported, purchased the Lexington Ice Factory for \$10,000.

Liberty—Electric-light Plant.—R. K. Campbell has organized the Bedford Electric Co. to erect an electric-light plant. The Schuyler system will be used for arc lighting; incandescent not selected yet. The capital stock is \$30,000.

Newport News—Machine Shop, &c.—The Berlin Iron Bridge Co., of East Berlin, Conn., have contract for the erection of a bending shed, 60x128 feet; ship shed, 60x320 feet; boiler shop, 100x300 feet, and a machine shop, 100x300 feet, for the Chesapeake Dry Dock & Construction Co., previously reported as building large ship-yard. The buildings are to be of brick and iron.

Newport News—Sash, Door and Blind Factory.—D. S. Jones will erect a sash, door and blind factory 49x100 feet. G. H. Evans has contract for building.

Norfolk—Soap Factory.—The Velline Soap Manufacturing Co. will change the location of its factory.

Norfolk—Steamboat Line.—A bill has been introduced in the legislature at Richmond to incorporate the Virginia Steamboat & Transportation Co. with H. W. Page, W. A. Young, R. B. Cooke and others as corporators, to operate a steamboat line. The capital stock is to be not less than \$20,000 nor more than \$50,000.

Pulaski City—Brick-yard.—Tenny & Nicholson are reported as enlarging their brick-yard.

Radford.—Bills have been introduced in the legislature at Richmond to incorporate the Radford Iron & Steel Co. and the Radford Trust Co.

Richmond—Cigarette and Tobacco Factory.—The American Tobacco Co., mentioned in last issue as applying for a charter, is organized to succeed the firm of Allen & Ginter, manufacturers of cigarettes and tobacco.

Richmond.—The Virginia Land & Improvement Co. has been incorporated with A. S. Buford, president; A. J. Mellekin, of Washington, D. C., vice-president, and E. A. Barber, secretary, to deal in real estate. The capital stock is to be not less than \$50,000 nor more than \$1,000,000.

Roanoke—Bridge Works.—The American Bridge & Iron Co., previously reported as erecting a blacksmith shop 100x75 feet, will also build an addition of 75 feet to the main building of its bridge works.

Roanoke—Carriage Factory.—The Bridgewater Carriage Co., lately mentioned as to build a carriage factory, has let contract for the erection of the building to C. C. Shockey & Co. The building will be of brick, three stories, and about 94x153 feet.

Roanoke.—W. S. Gooch and others will organize an investment company to have a capital stock of \$50,000.

Salem—Land.—The West End Land Co. is the name of the company reported in last issue as being organized by Nelson & Parsons to purchase 200 acres of land from William Ferguson.

Waynesboro—Gas Works, &c.—The Waynesboro Land & Improvement Co. has been incorporated with W. E. Bibb, of Louis C. H., president; T. H. Austin, vice-president, and R. W. Wright, secretary. The company has the power to build houses, gas works, electric railways, develop mineral lands, etc. The capital stock is \$500,000.

Waynesboro—New Town.—The Basic City Mining, Manufacturing & Land Co. has been incorporated with Samuel Forrier as president; Edw. McMahon, of Staunton, vice-president, and Marshall Booker, secretary, to build a new town at Waynesboro Junction to be called "Basic City." The capital stock authorized is \$1,000,000.

Waynesboro.—A board of trade has been organized with T. H. Antrim, president; A. C. Fox, vice-president, and J. E. Bibb, secretary.

Waynesboro—New Industries.—It is reported that there is a possibility of securing the location of an iron furnace, rolling mill, machine works, carriage factory and other industries. If true the Board of Trade can give information.

Waynesboro—Iron Mines.—The Herman Iron Co. is preparing to develop iron mines, and expect, it is stated, to mine 1,000 tons of ore per day.

Wythe County—Mineral Land.—Messrs. Whitman and Lyons, of Pulaski City, have optioned a tract of mineral land.

#### WEST VIRGINIA.

Alderson—Publishing.—H. H. Andrew will publish a newspaper.

Buchannon—Lumber Boom.—The Elk & Sugar Creek Boom Co. has been incorporated by C. P. Snyder, of Charleston; J. M. Camden, Jr., of Parkersburg; G. A. Newlan and others, to construct and operate one or more booms on the Elk river. The capital stock authorized is \$50,000.

Cameron—Oil Well.—An oil well is being sunk on the Dorsey farm.

Davis—Lime Works, &c.—The Crystal Lime & Mining Co. has been incorporated by H. L. Yoder of Parsons; E. M. Moss, of Bretz; F. S. Landstreet and others, for the manufacturing of lime and developing mineral lands. The authorized capital stock is \$25,000.

Falling Spring—Cream Separator.—The Greenbrier Creamery Co., of Lewisburg, will locate a cream separator at Falling Spring next summer.

Grafton—Oil Well.—The Pittsburg Improvement Co. will sink an oil well between Grafton and Webster.

Harper's Ferry—Flour Mill.—The sale of the flour mill and property of the Harper's Ferry Milling Co. to S. W. Lightner, lately reported, has been set aside by the court.

Huntington—Marble Quarries.—E. A. Bennett will develop marble quarries in the spring.\*

Jane Lew—Oil Wells.—Mr. Huggill, of Pittsburgh, Pa., has leased 8,000 acres of land for oil purposes.

Lewisburg—Cream Separator.—The Greenbrier Creamery Co. will erect another separator near Lewisburg.\*

Lock Seven—Planing Mill.—The Mohler Lumber Co. expects to start a new planing mill about March 1, 1890.

Marshall County—Gas and Oil Wells.—The Natural Gas Co. of West Virginia, of Wheeling, lately referred to as leasing gas and oil lands, has, it is reported, leased 9,000 acres additional from Parker & Shadrich for development.

Moundsville—Oil Well.—A. B. Reed & Co. contemplate sinking an oil well near Moundsville.

Moundsville—Electric-light Plant.—A stock company has been organized to erect the electric-light plant mentioned in last issue.

New Martinsville—Oil Well.—An oil well will be sunk on the farm of Aaron Morgan, near New Martinsville.

Parkersburg—Carriage Factory.—The L. N. Logan Carriage Co. will enlarge their carriage factory, erecting another building.

Short Creek—Oil Well.—The Wheeling Gas Co. is sinking an oil well.

Washington—Oil Well.—The Wheeling Oil Co., of Wheeling, is sinking an oil well.

Weston—Planing Mill, &c.—W. J. Kitson and others have organized a company to establish a planing mill and sash and door and blind factory.\*

Wheeling—Pottery.—The West Virginia China Co. has commenced the construction of a two-story addition, 35x35 feet, to its pottery at North Wheeling.

#### BURNED.

Augusta, Ga.—The brick works of J. H. & G. B. Parker, near Augusta.

Birmingham, Ala.—The saw mill of Dean & King, at King's Station, near Birmingham, damaged by a boiler explosion.

Charleston, W. Va.—The works of the Bradford Brick Co.

Cleburne, Texas.—The printing office of A. C. Scurluck.

Covington, Tenn.—The saw and planing mills of Randall & Co. damaged by a boiler explosion.

Dalour, La.—The sugar-house of Lathrop Bros. on their Greenwood plantation.

Davidson College, N. C.—The saw, planing and grist mill of S. M. Peacock.

Edwards, Miss.—The grist mill and cotton gin of W. S. Hamilton; loss \$3,500.

Greenville, Texas.—The grist mill and cotton gin of James Mowdy, near Greenville, damaged by a boiler explosion.

Jackson, Tenn.—The saw and grist mill of J. S. Smith.

Jasper, Fla.—The printing office of J. H. Antrim.

Liberty, S. C.—The saw and grist mill and cotton gin of Smith & Glenn.

Macon, Ga.—The blacksmith shop of the East Tennessee, Virginia & Georgia Railroad Co. (office, Knoxville, Tenn.)

Marion Station, Md.—The saw mill of E. E. Jackson & Co., of Salisbury.

Mt. Airy, N. C.—The tannery of R. R. Galloway.

Mt. Airy, N. C.—The woolen mill of J. F. & W. A. Moore.

Murfreesboro, Tenn.—The Murfreesboro Red Cedar Works; loss about \$10,000.

Nashville, Ark.—The Wilson Broom Factory.

Reddick, Fla.—The saw mill of N. A. Gordon.

Sulphur Springs, Texas.—The flour and planing mill of the Phoenix Roller Mills.

The cotton gins of Hewitt & Connor, near Island Ford, N. C.; W. B. Wingard, near Glee, Ala.; W. C. Thomas, La Fayette, Ala.; J. B. Fleming, near Goggansville, Ga.; Smith & Hope, Jackson, Tenn.; Charles King, Apex, N. C.; Mr. Calhoun, Colfax, La.; W. T. Griffin & Co., Woodland, N. C.; J. R. Arnold, near Benton, La.; on the Wallace place, near Shady Grove, La.; E. W. Jacobs and H. W. Ogden, both near Benton, La.; Swint Bros., Gibson, Ga.; Neil McKay, Richmond county, N. C.; T. Bingham, Moreland, Ga.; Smith & Hope, Jackson, Tenn.; W. H. Benjamin, Lake Providence, La.; A. E. Ball, 16 miles from Paris, Miss.; M. Hall, Timmonsville, S. C.; J. R. Lancaster, near Waxahachie, Texas; Irvin Sawyer, Macon, Ga.; T. Thompson, Arab, Ala.; Mrs. E. R. Skinner, near Demopolis, Ala.; George W. Yates, near Macon, Ga.; S. Bingham, near Newnan, Ga., and A. E. Ball, Paris, Texas, have been burned.

**THE De Bardeleben Coal & Iron Co., the Bessemer Iron & Steel Co., the Little Belle Iron Co., all of Bessemer, Ala., and the Eureka Iron Co., of Oxmoor, Ala., have consolidated with a capital stock of \$10,000,000. It is proposed to issue bonds to the extent of \$2,000,000 or \$3,000,000, to have ready cash for working capital. The property held by the new company aggregates 140,000 acres of the best of Birmingham coal and iron lands, besides five furnaces at Bessemer and two at Oxmoor. Seven coal mines are now in operation, having a daily output of 5,000 tons. It is understood that the company proposes to build two new furnaces at Bessemer, which, with the furnaces already in hand, will give a daily capacity of 1,000 tons. Mr. H. F. De Bardeleben has shown marvellous energy and skill in building up his property, which now is one of the best equipped and most extensive iron concerns in America.**



## MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Artesian Well.—F. K. Richardson, Vernon, Texas, will receive bids until January 15, 1890, for sinking an artesian well.

Bell.—The chief of the Fire Department, Tampa, Fla., will purchase a fire-alarm bell.

Blooming Train.—The Henderson Steel & Manufacturing Co., Birmingham, Ala., will shortly be ready to receive bids for the building of a blooming train at its steel plant.

Boiler and Engine.—The Trinidad Asphaltum & Block Pavement Co., Fort Payne, Ala., wants a 75 to 100 horse-power engine and 125 horse-power boiler.

Boiler, Engine and Cotton Gin.—C. M. Faulkner, Paradise, Texas, will purchase next spring a 16 horse-power boiler and engine, 2 cotton-gin stands, condensers, elevator, feeder and cotton press.

Boiler, Engine and Pumps.—The Tuscumbia Contracting Co., Tuscumbia, Ala., wants boiler, engine and pumps.

Bolts, Spikes, &c.—A. E. Smyrk, city commissioner, Baltimore, Md., will receive proposals until December 27 for furnishing and delivering bolts, wrought iron washers and steel wire spikes to be used in the rebuilding of Light street bridge.

Brick and Tile Works.—W. J. Kitson, Weston, W. Va., wants prices on machinery for brick and tile works.

Canning Factory.—D. G. Dunklin, Greenville, Ala., wants prices on outfit for canning factory.

Canning Factory.—E. E. Hilliard, Scotland Neck, N. C., wants prices on outfit for a small canning factory; also information about the business.

Corn Mill, &c.—C. M. Faulkner, Paradise, Texas, will purchase a corn mill and pulleys next spring.

Creamery Outfits.—The Greenbrier Creamery Co., Lewisburg, W. Va., will purchase two outfits for creamery, including 25 horse-power boilers and engines, tanks, etc.

Dry-kiln and Planers.—Parrott, Cheeves & West, Atlanta, Ga., will add dry-kilns and planers to their mill at Cochran.

Dynamo.—E. L. Colburn, Pine Bluff, Ark., wants prices on a dynamo for lighting a flour mill and grain elevator of from 60 to 80 lights capacity.

Dynamo, &c.—J. E. Clark, Mossy Creek, Tenn., wants estimates per horse-power on dynamo, turbine wheel, etc., for transmitting water-power by electricity a distance of two miles.

Electric-light Plant.—George Dewey, chief of bureau of equipment and recruiting, U. S. N., Washington, D. C., will receive proposals until December 30 for the installation of an electric-light plant on board the United States monitor Miantonomah.

Elevator.—W. C. Smith & Brother, Elberton, Ga., will purchase an elevator for their new hotel.

Engine and Gang Edger.—W. R. Santley & Co., Jonesborough, Ark., want a 30 horse-power second-hand engine and a gang edger.

Engine.—G. F. Quackinbush & Co., Tallapoosa, Ga., want a 25 horse-power engine to run an Edison electric-light plant.

Fertilizer Machinery.—Albert Montgomery, P. O. Box 558, New Orleans, La., wants prices on machinery to extract the moisture from animal excrement so as to use for fertilizing purposes.

Fire Engine and Apparatus.—The city of Sandersville, Ga., expects to purchase in the near future a fire engine and the necessary apparatus. Address the mayor.

Fire Engine.—J. Alexander Preston, president of the board of fire commissioners, Baltimore, Md., will receive proposals until December 24 for furnishing one double-tank 85-gallon chemical fire engine.

Grist Mill.—Sterrett Tate, 20 W. Belmont street, Pensacola, Fla., wants prices on a corn grist mill of 40 to 75 barrels daily capacity.

Heating and Ventilating Apparatus.—James Fricker, Americus, Ga., desires to be put in communication with the manager of the Sneed system of heating and ventilating with a view of adopting it for a \$20,000 church in course of erection.

Hydraulic Elevator.—James H. Windrim, United States supervising architect, Washington, D. C., desires bids not later than January 6, 1890, for a hydraulic elevator for the United

States courthouse and postoffice at Fort Smith, Ark.

Lathes, Planer, &c.—The Eagle Foundry Co., Greensboro, N. C., wants prices on lathes 6 and 10 feet between centers, planer 2x10 feet, and drill presser, chuck, etc., for a machine shop.

Mixers, Presses, &c.—The Trinidad Asphaltum & Block Pavement Co., Fort Payne, Ala., wants mixers, presses, special tank work, pulleys and shafting.

Piling, &c.—A. E. Smyrk, city commissioner, Baltimore, Md., will receive proposals until December 27 for furnishing and driving round and sheet piling for Boston street bridge; also lumber for flooring same.

Pump.—The Trinidad Asphaltum & Block Pavement Co., Fort Payne, Ala., wants a steam pump.

Quarrying Machinery.—E. A. Bennett, Huntington, W. Va., wants prices on quarrying machinery to be operated with power.

Rails.—W. R. Santley & Co., Jonesborough, Ark., will want second-hand 20-lb. rails for tramroad.

Railway Equipment.—E. C. Machen, of the Eatonton & Machen Railroad, Machen, Ga., now being constructed, wants equipment, including freight and passenger cars, for the new road.

Roofing and Siding.—G. W. Bollinger, Jonesboro, Tenn., wants prices on roofing and siding.

Sash, Door and Blind Factory.—The Tuscumbia Contracting Co., Tuscumbia, Ala., wants machinery for sash, door and blind factory.

Saw Mill, &c.—H. L. Reynolds, Dayton, Tenn., will want a saw mill, lath saws and shingle machinery.

Steam Heating and Elevator.—The new Masonic Temple, Little Rock, Ark., to be erected will be equipped with steam heating apparatus and an elevator. John G. Fletcher can give information.

Tobacco Factory.—Taylor & Poore, Clarksburg, Tenn., want a smoking tobacco cutter and packer, screw presses, two or three sets of shapes or molds, licorice kettle and a machine to separate dust and fine tobacco from smoking tobacco.

Tram-road.—H. L. Reynolds, Dayton, Tenn., will want outfit for tram road one mile long.

Tram road.—Parrott, Cheeves & West, Atlanta, Ga., will add tram-road and will want locomotive and cars.

Watchman's Clocks.—S. B. Lowe, Chattanooga, Tenn., wants the address of manufacturers of watchman's clocks.

Water Works.—W. J. Kitson, Weston, W. Va., wants estimates for the construction of water works.

Water Works.—William Shelton, mayor, Marlin, Texas, will receive proposals until January 8, 1890, for constructing a system of water works.

Wood-working Machinery.—W. J. Kitson, Weston, W. Va., wants prices on sash, door and blind machinery, etc.

Wood-working Machinery.—J. L. Waggoner, Fayetteville, Tenn., wants band saw, single-spindle shaper, blind stile boring and mortising machine and a carving machine.

Wood-working Machinery, &c.—G. W. Bollinger, Jonesboro, Tenn., wants prices on wood-working machinery, engine lathe and foundry supplies.

## A BIG SALE.

235 Lots for \$96,000 in One Day—  
457 Lots for \$177,000 in  
Four Days.

SALEM, VA., Dec. 14, 1889.

Editor Manufacturers' Record:

The above captions read like a wild romance or idle jest. But these things are everyone of them literally true, and are given merely to give the readers of the MANUFACTURERS' RECORD a plain, modest statement of what is going on here. I will give a brief history of the movement here, so that the facts here given may be understood. On October 2d, 1889, two companies were formed here—the one the Salem Furnace Co., capital stock \$250,000; and the other the Salem Improvement Co., capital stock \$300,000. Every dollar of the stock of both the companies has been taken. The furnace, capacity 120 tons, is being built very rapidly and will be ready to go into blast in the early summer of 1890. The improvement company has laid out a small part of its 900 acres of fine lands into business and residence lots. A part of these lots were placed on sale at noon on December 11th, and by 9 o'clock that night 235 lots had been sold at the agree-

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Boiler Plate and Tank Iron, Lap-Welded Pipe and Boiler Tubes, Boiler and Sheet Iron Rivets, Steam Brass Goods and Engine Trimmings, Iron Valves and Fittings, Pipe Work and Machinists' Tools, Wood and Iron Pulleys, Belting, Hose and Packing, SEWER PIPE, FIRE BRICK and CLAY.

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RESULTS GUARANTEED.

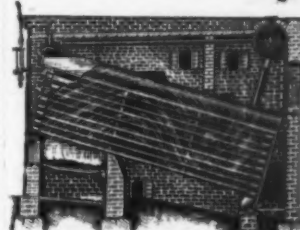
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ARCHITECTS and MILL ENGINEERS  
PROVIDENCE, R. I. Plans, Specifications and  
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## MILL ENGINEERS,

NEWBURYPORT, MASS.

PLANS AND SPECIFICATIONS FURNISHED FOR THE CONSTRUCTION OF EQUIPMENT AND ORGANIZATION OF COTTON AND WOOLEN MILLS

## WRITE FOR PRICES TO THE SOUTHERN EQUIPMENT CO.

Representing reliable manufacturers of  
Railway, Mining and Mill Supplies.  
ORDERS FILLED PROMPTLY.  
Chattanooga, Tenn.

gate price of \$96,000. On Saturday evening, only 3½ days after the sale was opened, 457 lots have been sold for \$171,000.

The lots are sold through the real estate agencies of the town, but on the first day of the sale, when two or more persons applied for the same lot, the said lot was put up at auction, and the bidding was quite lively.

So great has been the demand for the lots that the company will put a little advance on present prices to-morrow.

In addition to the furnace, the large steam tannery, the Camden Iron Works, the Salem Folding Chair Co., there will be a rolling mill organized here in a few days. Several other large plants are reasonably certain to locate here very soon, and just here let me say a word to men who want to locate in our rapidly growing town. The Salem Improvement Co. has about 100 acres of fine level land, fronting both the railroad and the river, and very well suited to the taste of the most fastidious manufacturer, and this land will be given free to manufacturers who mean business. Not only is this true, but there is considerable money here that is ready and willing to go into the stock of new industries here.

CITIZEN.

A YEAR'S subscription to the MANUFACTURER'S RECORD will show you that it is invaluable to all progressive business men. Try it.

If you are thinking of enlarging your mill, factory or mine, or of purchasing machinery of any kind, send us a postal card giving character of machinery desired.

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EASTERN OFFICE, EQUITY BUILDING, BOSTON

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Steamers leave daily (except Sunday) Union Dock 6.30 P. M., Canton Wharf 7 P. M.; arrives Old Point Comfort 7 A. M., at Norfolk 8 A. M., Portsmouth 8.15 A. M. At OLD POINT COMFORT connect with CHESAPEAKE & OHIO RAILROAD for Richmond, Charlottesville, Greenbrier, White Sulphur Springs, Louisville, Cincinnati and all points West. At NORFOLK with NORFOLK & WESTERN RAILROAD for Petersburg, Richmond, Lynchburg, Roanoke, Bristol, Knoxville, Chattanooga, Memphis and the Southwest; also with the NORFOLK SOUTHERN RAILROAD for Elizabeth City, Edenton and Eastern North Carolina. At PORTSMOUTH, VA. with SEABOARD & ROANOKE RAILROAD for Weiden, Raleigh, Southern Pines, Charlotte, Fayetteville, Newberne, Wilmington, Charleston, Columbia, Augusta, Savannah, Jacksonville and all PRINCIPAL SOUTHERN CITIES.  
Palace Steamers, Unsurpassed Cuisine, Uninterrupted Night's Rest, Sure Connection.  
For Tickets and Information apply at Company's Office, 129 E. Baltimore St. or on board steamers.  
E. BROWN, G. T. A. EDWIN JONES, Agent

## Building Notes.

Aberdeen, Miss.—The Baptists contemplate the erection of a \$15,000 church. The city of Aberdeen is also agitating the erection of a market-house.

Abilene, Texas.—It is rumored that a college building will be erected.

Alexander City, Ala.—Parker, Cowles & Co. and C. J. Jackson will erect buildings.

Alexandria, Va.—The Old Dominion Building Association contemplates the erection of a block of dwellings.

Atlanta, Ga.—The Hebrews contemplate the erection of a club house.

Atlanta, Ga.—The Atlanta National Building & Loan Association has been organized with R. J. Lowry, president, and J. W. Goldsmith, secretary and treasurer.

Baltimore, Md.—The Mechanics' National Bank is agitating the erection of a new building.

Baltimore, Md.—The Messiah English Lutheran congregation will erect a church to cost \$25,000; F. G. Morrison, a dwelling to cost \$20,000; I. E. Hamilton, a dwelling to cost \$7,000; Wm. H. Bell, three dwellings to cost \$6,000.

Baltimore, Md.—A Catholic church is to be erected at Curtis' creek.

Bessemer, Ala.—The De Bardeleben Coal & Iron Co., of Bessemer, is erecting 70 houses at Sumter, near Bessemer, where it is opening coal mines. McAllister Bros., of Birmingham, have the contract.

Birmingham, Ala.—B. Gilreath contemplates the erection of a four-story building.

Birmingham, Ala.—P. J. Gillan has the contract for the erection of the Charity Hospital mentioned recently. It will cost about \$120,000.

Birmingham, Ala.—Thomas F. Walsh will erect a house to cost \$8,000; Buyc & Thomas, a two-story house to cost \$12,000.

Bristol, Tenn.—It is reported that the Baltimore Oil Co. will erect storage tank.

Brunswick, Ga.—Valentine & Brown have the contract for the erection of a \$17,000 schoolhouse, recently mentioned.

Buena Vista, Va.—Hotel.—Clements & McCall can give information regarding the hotel lately mentioned to be erected.

Chilton, Ala.—Hotel.—It is reported that Richard Coe, of Staunton, and Daniel Partridge, of Selma, Ala., will erect a hotel.

Dallas, Texas. Twelve residences are being erected in Betterton Circle, Oak Cliff.

Dallas, Texas.—It is stated that N. J. Bradu will erect a college at Oak Cliff for young ladies.

Danville, Va.—A new market-house, armory, engine-house and police station to cost \$50,000 will, it is stated, be erected.

Dayton, Tenn.—A branch of the Illinois Building & Loan Association, of Bloomington, Ill., has been organized with M. A. Farrell as president.

Fort Payne, Ala.—A branch, previously mentioned, of the National Mutual Building & Loan Association of New York, has been organized with G. E. Lathrop as president.

Goodlettsville, Tenn.—Hotel.—It is rumored that a stock company will erect a hotel.

Hardinsburg, Ky.—The Louisville, Hardinsburg & Western Railroad Co. (office, Louisville, Ky.) contemplates the erection of a depot.

Henderson, Ky.—Hotel.—Messrs. Kleymeyer & Klute state that they will not erect hotel mentioned in last issue, but contemplate building several storehouses.

Johnson City, Tenn.—Hotel.—Gen. J. T. Wilder

reports that all the money has been secured for the building of the hotel previously reported.

Kershaw, S. C.—A building and loan association with J. E. W. Haile as president has been organized.

Knoxville, Tenn.—Application has been made to incorporate the I. O. O. F. Building & Loan Association.

Louisville, Ky.—The Builders & Traders' Exchange contemplates the erection of a new exchange building.

Macon, Ga.—It is reported that the Covington & Macon Railroad Co. contemplates the erection of six depots and 20 dwellings between Macon and Athens. John Knight, master carpenter, can give information.

Macon, Ga.—W. A. Gans & Co., S. Josephson and Harris & Mitchell will erect business buildings on the site of the Schofield Hotel, recently reported as burned.

Macon, Ga.—Harris & Mitchell contemplate the erection of 20 houses.

Montgomery, Ala.—A branch of the Interstate Building & Loan Association, of Bloomington, Ill., has been organized with P. B. Bibb as president.

Montgomery, Ala.—It is stated that the Montgomery Warehouse & Storage Co. will be organized to build a warehouse 200x300 feet.

Mooresboro, N. C.—A building and loan association has been incorporated with T. D. Scruggs as president.

Nashville, Tenn.—W. M. Duncan contemplates the erection of a seven-story office building.

Nashville, Tenn.—George W. Thompson will erect a two-story dwelling to cost \$7,000; H. H. Barr, a two-story brick dwelling to cost \$7,000; Eugene Corbett, a two-story brick dwelling to cost \$9,500.

Nashville, Tenn.—The Nashville, Chattanooga & St. Louis Railway Co. is agitating the question of erecting a union depot.

Natchez, Miss.—A branch of the Interstate Building & Loan Association has been organized with C. R. Byrnes, Jr., as president.

New Decatur, Ala.—The Cotaco Opera Co. contemplates erecting a \$60,000 opera-house.

Newport, Ky.—A new public school building will be erected. A site has been purchased.

Norfolk, Va.—The city of Norfolk contemplates the erection of a police station and engine-house. The mayor can give information.

Norfolk, Va.—It is stated that the Norfolk & Western (office, Roanoke) and the Norfolk Southern Railroad Companies are agitating the question of erecting a union depot at South Norfolk.

Owensboro, Ky.—Professor Stuart, of Shelbyville, Ky., states that he will move his college to Owensboro if that town will erect suitable buildings.

Raleigh, N. C.—The union depot previously mentioned to be erected by the Richmond & Danville and the Raleigh & Gaston Railroad Companies may cost \$75,000 instead of \$50,000, as was recently stated.

Roanoke, Va.—The report that the Norfolk & Western Railroad Co., mentioned last week, would erect an addition to their office building is premature.

Rocky Mount, N. C.—It is stated that the Farmers' Alliance of Nash county, N. C., will erect a warehouse.

Roxboro, N. C.—J. A. Long is erecting a warehouse 80x160 feet.

Ruddel's Mills, Ky.—Porter Jett, of Millersburg, contemplates erecting buildings on property recently purchased at Ruddel's Mills.

Salem, Va.—A. M. Bowman, of Saltville, Va.,

will, it is reported, build a residence and a three-story business block.

Salisbury, N. C.—The erection of a Methodist church is contemplated.

Savannah, Ga.—Frederick Winter contemplates the erection of buildings to cost about \$25,000.

Sheffield, Ala.—Beegle & Baldwin have secured the contract for the erection of the Keller building.

St. Georges, S. C.—A branch of the Mutual Building & Loan Association, of Atlanta, Ga., has been established with J. P. Millard as president.

Suffolk, Va.—It is rumored that a union depot for the Norfolk & Western Railroad Co. (office, Roanoke, Va.), the Atlantic & Danville Railroad Co. (office, Norfolk, Va.), the Norfolk & Carolina Railroad Co. (office, Norfolk, Va.) and the Suffolk & Carolina Railroad Co. will be built.

Wadesboro, N. C.—Elder Barret is erecting, it is stated, at Pee Dee Station, a four-story brick schoolhouse for colored children.

Washington, D. C.—James L. Kernan will erect a large entrance-way to his theatre.

Washington, D. C.—James H. Windrim, supervising architect, U. S. Treasury Department, will receive until December 28 bids for the decorative painting in the Baltimore postoffice and courthouse. He will also receive until January 6, 1890, bids for equipping the U. S. courthouse and post-office at Fort Smith, Ark., with a hydraulic elevator.

Washington, D. C.—Charles E. Banes will erect six dwellings to cost \$15,000; Geo. A. Prevost, a dwelling to cost \$12,000; A. Lulley, one dwelling to cost \$15,000; Patrick Wade, 8 two-story dwellings to cost \$25,000; J. W. Foster, a three-story and office building to cost \$5,000; Otto Rynecke, a dwelling to cost \$5,500; Wm. Yost & Bro., a warehouse to cost \$10,000; plans have been made by F. A. Buckingham for 12 dwellings to cost \$27,000; by J. G. Meyers, for one dwelling to cost \$5,000; by A. B. Bibb, for two dwellings to cost \$7,000.

Weatherford, Texas.—M. E. Eddleman, J. Lang & Co., John W. Ross and R. M. Thompson are erecting stone buildings.

Weldon, N. C.—A branch of the Southern Building & Loan Association, of Huntsville, Ala., has been organized with W. R. Smith as president.

Weston, W. Va.—Hotel.—A stock company has been organized to build a hotel; contract for brick work let to W. J. Kitson. Electric lights and other modern improvements will be put in.

Wheeling, W. Va.—Michael Riley will add a story to contain 20 additional offices to his office building. Klieves, Kraft & Co. have the contract.

Wheeling, W. Va.—The Pittsburgh, Wheeling & Kentucky Railroad Co. will erect a \$40,000 depot.

**B**IDS will be received at the office of the secretary of the Vernon Artesian Well & Water Co., at Vernon, Texas, for the boring of an Artesian Well. Bids will be received until January 15, 1890, the company reserving the right to reject any and all bids. F. K. RICHARDSON, Secy.

## Lime and Marble Quarries FOR SALE.

In Virginia, a tract of 750 acres, partly timbered, balance suited for agriculture and grazing, being well watered; containing also practically inexhaustible quarries of limestone and marble. The marble is blue, gray and pink, suitable for building or for soda fountains, counters, tessellated floors, buildings, &c. Easily quarried; water-power on spot. Lime is of established reputation and best quality sold for years, commanding ready sale for whole output in carload lots at large profits per barrel. Situated within two-thirds of a mile of two railroads. Beds of Yellow Ochre for sale also. For full particulars apply to

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APPLY TO

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IF this issue of the MANUFACTURERS' RECORD is of no special value to you (and it ought to be of interest to all progressive business men) then please give it to some one who wants to learn of the advantages of the South.

THE South would like to have a few thousand more such New Englanders as Hon. J. W. Spaulding, president of the Fort Payne (Ala.) Coal & Iron Co. Though in the South only about one year, Mr. Spaulding has done a great work for this section in building up such a hive of industry as Fort Payne. May many more of his kind follow his example and come South.

**GOLD MINING—DAHLONEGA, GA., Dec. 1, 1889.** The Dahlonega Gold Mine & Milling Co. have made a purchase which they propose to develop. They have purchased a stamp mill and all machinery for necessary operations at the present. A little later on they may desire an electric hoist, etc. H. R. HORNOR.

**NO ENGLISH SYNDICATE—NASHVILLE, TENN., Dec. 5, 1889.**—The English syndicate is a myth. At first we thought there was something in it, but we have concluded that it was the imaginary vagary of a first-class schemer. We have never received a proposition for the purchase of our property from any syndicate, but it seems that we have been duped temporarily by one whom we supposed was an authorized agent. NASHVILLE MILL CO.

#### WANTS.

**WANTED.**—Capital to develop Florida phosphates. Drawer "N," Tallahassee, Fla.

**WANTED.**—Manufacturers' spot cash price on Doors, Sash, Blinds, Sash Weights, Etc. Also Lime, Cement, Fire Brick and Builders' Supplies. Address A. 66, care Manfrs' Record.

**WANTED.**—A first-class Laundry Soap Maker to take charge of small factory. One who will take a small interest preferred. Best reference required. Address S. LEMLY, Texarkana, Texas.

**WANTED.**—Situation as Superintendent of Cotton Mill; best of references from present employers, with whom have been with as such for nearly 20 years, and others to whom I am well known. Address HUGH BONE, Ellicott City, Howard county, Md.

**WANTED.**—A position as Bookkeeper or clerk by a young man 25 years of age, who has filled the two positions together for six years in the hay, grain and retail lumber business. Good plain writer. Best of references furnished. Address BOOKKEEPER, Box 77, Fort Deposit, Md.

**WANTED.**—Manufacturers' cash discount on Brass Valves, Iron Fittings, Boiler Tubes, Iron Pipe, Machinists' Hand Tools, Rubber Belt, Leather Belt, Saw Mills, Cane Mills, Evaporators, Corn Mills, Cotton Gins, Cotton and Hay Presses. Also General Supplies. Address M. 66, care Manufacturers' Record.

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**SEALED PROPOSALS** will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M., on the 16th day of January, 1890, for all the labor and materials required to construct and complete the Wharf, Boathouse, Barracks, Hospital, Disinfecting Apparatus, &c., for the U. S. Quarantine Station, Angel Island, San Francisco, Cal., in accordance with the drawings and specification, copies of which may be had on application at the office and the office of Surgeon P. H. Baille, U. S. Marine Hospital Service, San Francisco, Cal. Each bid must be accompanied by a certified check for \$500. This department will reject all bids received after the time fixed for opening same; also, bids which do not comply strictly with all the requirements of this invitation. **JAS. H. WINDRIM**, Supervising Architect. December 5th, 1889.

**SEALED PROPOSALS** will be received from Decorative Painters at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M., on the 26th day of December, 1889, for all the labor and materials required to do all the decorative painting, &c., for the United States Postoffice, Court House, &c., building at Baltimore, Md., in accordance with general plans of the building and specification, which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids received after the time fixed for opening same; also, bids which do not comply strictly with all the requirements of this invitation. **JAS. H. WINDRIM**, Supervising Architect. December 5th, 1889.

**SEALED PROPOSALS** will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M., on the 6th day of January, 1890, for furnishing and putting in place complete in the U. S. Court House and Postoffice building at Fort Smith, Ark., one hydraulic passenger elevator, in accordance with the drawings and specification, copies of which may be had on application at this office or the office of the Superintendent. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids delivered after the time fixed for opening same; also, bids which do not comply strictly with all the requirements of this invitation. **JAS. H. WINDRIM**, Supervising Architect. December 11th, 1889.

**SEALED PROPOSALS** will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M., on the 8th day of January, 1890, for all the labor and materials required for the erection and completion of all the stone and brick masonry of the superstructure of the U. S. Postoffice, Court-house, &c., building at Charleston, S. C., in accordance with the drawings and specification, copies of which may be had on application at this office and the office of the Superintendent. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids delivered after the time fixed for opening the same; also, bids which do not comply strictly with all the requirements of this invitation. **JAS. H. WINDRIM**, Supervising Architect. December 12th, 1889.

**SEALED PROPOSALS** will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M., on the 4th day of January, 1890, for all the labor and materials required to build the brick manholes and trap-well, furnish and lay all the terra cotta sewer-pipe, cast-iron drain and down-pipe, &c., required for the Postoffice, &c., building at Brooklyn, N. Y., in accordance with the drawings and specification, copies of which may be had on application at this office and the office of the Superintendent. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids received after the time fixed for opening the same, also bids which do not comply strictly with all the requirements of this invitation. **JAS. H. WINDRIM**, Supervising Architect. December 13th, 1889.

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isher, 36 inches.

52 F. &amp; P. Cards, 36 inches.

Railway Heads, Belts, Shafting and Drawings.

3 Slubbers and 6 Speeders, Lowell Machine Co.

make.

FOR PRICES AND TERMS APPLY TO

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**REGINALD CANNING & CO.**

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**Railway Equipment**

Have for Sale, for cash or on car trust plan, Locomotives, Passenger and Freight Cars of both Standard and Narrow Gauge roads. Whether you wish to buy or sell we solicit correspondence.

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Light Sections Rails and Spikes in stock.

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## TRADE NOTES.

THE Emerson time stamp, advertised in another column, is a most simple and ingenious instrument, and a most needful one in every well-regulated office. At one blow it prints a fac-simile of the dial and hands of a clock, showing the exact time at which the stamping was done. The name and address of the concern using the stamp is placed in a circle around the clock dial. The instrument is simple of construction and solidly made, so that no damage is done to the parts by harsh usage. It is an instrument that is necessary in almost any kind of an office, and is destined to have an enormous sale.

SOUTHERN lands, whether of mineral or timber, are among the best investments, as they are sure to return the investment increased many folds. One of the best known firms in the South dealing in such properties is W. M. Scott & Co., of Atlanta, Ga., who describe in our advertising columns some very choice lands now in their hands for sale. Many of the mineral lands have been developed sufficiently to assure their great value. Great areas of timber land which must in a few years be almost priceless, can now be had for a mere nominal sum per acre. Investors will do well to read this advertisement carefully and enter into correspondence with this firm, or call upon them at their office in the Kimball House.

In these days of frequent criminal manipulation of financial paper, it is necessary for every man to protect himself and his paper from alterations. One of the best and neatest machines of this kind is the Abbott check perforator, made by the Abbott Machine Co., 5153 West Washington street, Chicago. This perforator does not make an ill-shaped hole in the check, but stamps the sum specified by means of small perforations, half the size of the head of a pin, and braces the face of the check up on the front with the dollar sign and backs it with a star, so there is no possible way of altering it. It does the neatest work of any machine of the kind we have ever seen. Any information regarding it can be had upon application to the manufacturers.

INVESTORS seeking opportunities to place money will read with interest the advertisement in another column of the Western Farm Mortgage Trust Co., of Lawrence, Kansas. This company does not try to obtain the high interest rates paid by pioneers and first settlers, but waits until the property is held by men who are making their homes upon it, thus securing borrowers whose interest it is to pay principal and interest when due, and its loans are made on available property in or near large cities, where people own their land and buildings, and where there is some intrinsic value. Any information regarding these securities can be had by applying to F. B. Rogers, Rialto Building, Boston, or to the headquarters of the company at Lawrence, Kansas.

THE Brown & Sharpe Manufacturing Co., of Providence, R. I., the well-known makers of machinery, sewing machines, iron castings and patented articles, publish an elegantly illustrated supplement to their very full descriptive catalogue. The illustrations are among the finest ever seen in a trade publication. They are designed to show to better advantage the plans and workings of the firm's larger machines, and are executed in the best style of the engraver and draughtsman. The company, founded as long ago as 1833 and incorporated in 1868, have a world-wide reputation for the excellence of the products of their works. The original floor-space of the plant was 1,800 square feet, while now four acres are required to accommodate the establishment.

THE SURE GRIP STEEL TACKLE BLOCK. This admirable invention is one of the latest specialties of the Fulton Iron & Engine Works, of Detroit, Mich. The company will send one of these blocks to any responsible person for trial, and mail a descriptive illustrated circular containing strong testimonials as to the value of the invention. The Sure Grip will hold the load at any point without fastening the rope and costs, practically, no more than the ordinary block. The blocks come in five sizes and have stood, without breaking, strains of 2,800, 3,800, 4,500, 5,800 and 9,000 pounds respectively. The brake always holds under the severest strains. The blocks range in price from \$3 to \$14, and have proved a very successful venture for the company.

A WINTER PARADISE.—The Hygeia Hotel, Old Point Comfort, Va., has earned a national reputation as a health resort. Situated at the confluence of the Chesapeake and Hampton Roads, the climatic advantages of Old Point Comfort are unusually noticeable. It is but a few miles from the Hygeia to the open sea, and the mild influences of the gulf stream soften the rigors of winter and render that season genial and balmy. Infectious diseases or lung troubles are unknown at the Point, and overtaken constitutions quickly recuperate amid the influences of its tempered climate. The Hygeia fills all the requirements of a model hotel, with its fine appointments, Turkish, Russian, electric and hot sea baths and spacious glass-enclosed verandahs overlooking the broad roadstead. For terms and illustrative pamphlet address F. N. Pike, manager, Old Point Comfort, Va.

ONE of the agencies that has been most active in the growth of Arkansas has been the First National Bank of Little Rock, under the able management of its president, Mr. Logan H. Roots. In connection with this bank, although it is an entirely distinct institution, is the Arkansas Loan & Trust Co., also under the same management. Mr. Roots has been one of the pioneers in the development of Arkansas. He is thoroughly acquainted with the business interests of the State. These institutions aid in every way possible, governed by conservative judgment, in building up Little Rock, and much of the city's progress is due to their judicious assistance and advice. Bankers, capitalists and others seeking investment in Arkansas, or in any way interested in its development, will do well to consult Mr. Roots or either of these institutions. Arkansas is growing and developing with marvellous rapidity, and investments there prove most remunerative.

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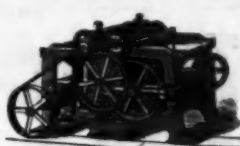
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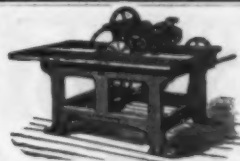
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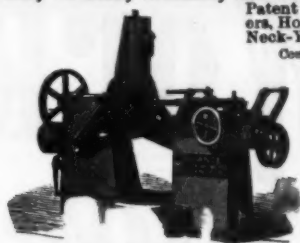
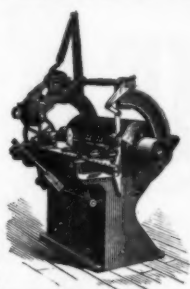
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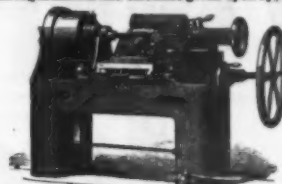
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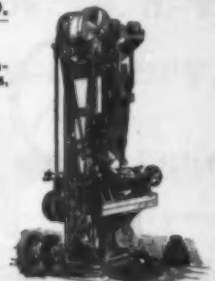
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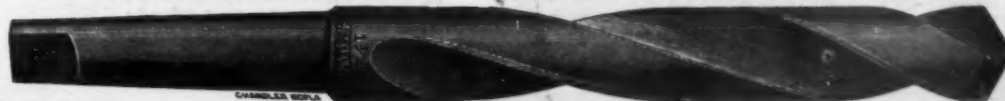
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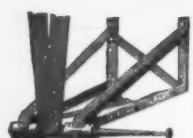
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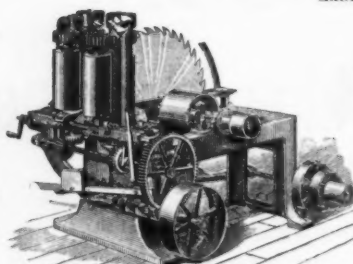
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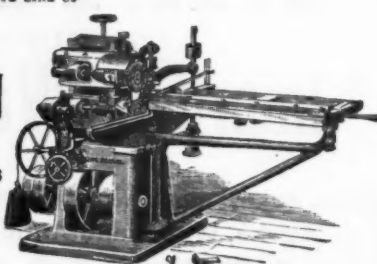
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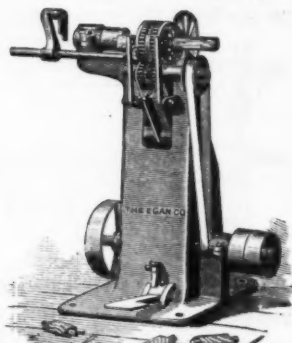
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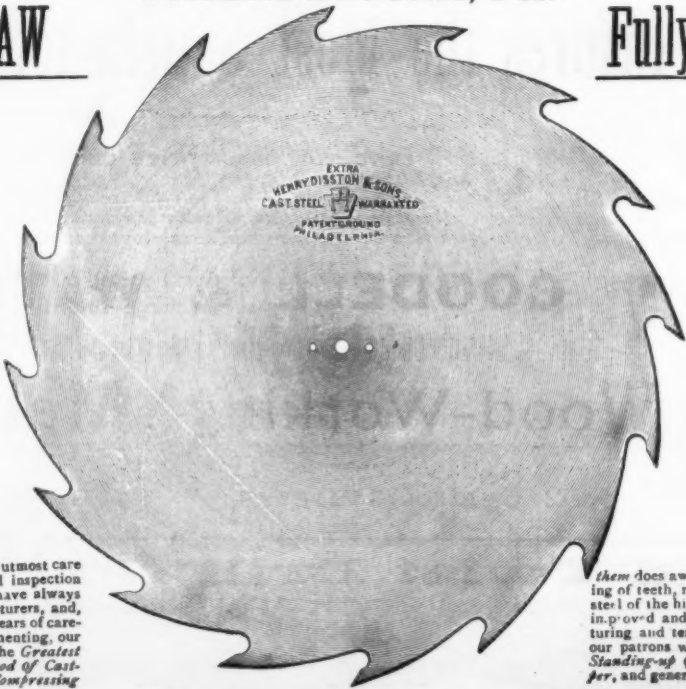
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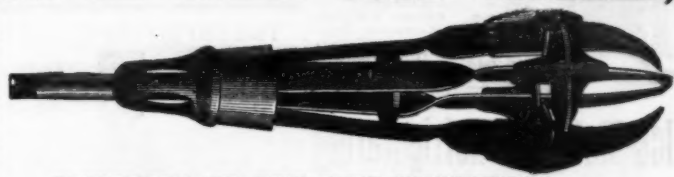


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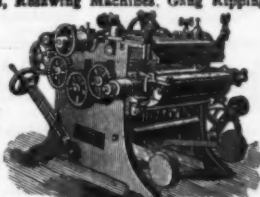
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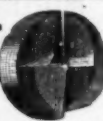


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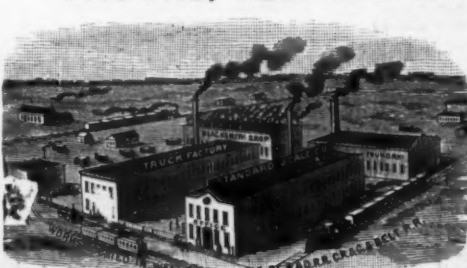
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Perspective View.



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WORKMEN BY INSURING WITH

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## TRADE NOTES.

**THE LOWELL CARD CO.**, of Lowell, Mass., report for the last six months the best run of business experienced in years.

**THE SWETT BAND SAWS AND TOOLS**, Frank W. Swett, manufacturer, 69 S. Canal street, Chicago, Ill. Among large concerns recently supplied by Mr. Swett with a complete outfit of his band saws and goods is the well known Hall & Brown Wood-Working Machine Co., of St. Louis.

USERS of steam will be interested in a little pamphlet issued by the Mason Regulator Co., 10 Central street, Boston, descriptive of the steam regulating devices and appliances manufactured by this company. All of these devices are conceived with the intention of adding increased safety to the management of steam, and greater economy in the use of it.

**THE FRANKLIN FOUNDRY & MACHINE SHOP**, Providence, R. I., have at present in process plans for a 53,000-spindle cotton mill, made under the immediate direction of the agent, E. Gibson, the eminent mill expert, ably assisted by his son, Frank Gibson, mechanical engineer. This is to be a yarn mill, three stories high, to be located in Florence, Ala.

**THE LOWE CARD GRINDER**.—Thos. C. Entwistle, Lowell, Mass., is prepared to furnish the "Lowe traverse wheel card grinder." Over 600 of these machines in use in English and American mills attest the merits of the invention. Mr. Entwistle also supplies an improved beaming machine for long chain work, double or single chains, recently put in use by the Eagle & Phoenix Mills, Columbus, Ga.

**TO BANKERS**.—The Chrome Steel Works, located at Kent avenue, Keap and Hooper streets, Brooklyn, N. Y., are well known as manufacturers of the celebrated chrome steel, and also as one of the most enterprising and wide-awake manufacturing concerns of the country. Their five-ply burglar and fire-proof welded chrome steel and iron plates, used in the manufacture of safes, vaults and jails, are having an immense sale.

**BRASS CASTINGS, ETC.**—The card of A. L. Smith, 163 Worthen street, Lowell, Mass., appears in this issue. At his new foundry recently completed are turned out superior quality brass and composition castings of all descriptions. The excellence of Mr. Smith's goods may be judged of from the fact that in an order for three tons of heavy brass bearings turned out from the factory, only 40 pounds were found defective. Mr. Smith reports his business as constantly increasing.

**LAND IN THE SOUTHERN LOWELL**.—J. H. Alexander, Augusta, Ga., offers an excellent inducement to investors in the shape of 2,500 acres of land contiguous to that flourishing manufacturing city. Augusta, from the number of its cotton factories and its splendid water-power, is styled the "Lowell of the South." The lands in question are offered on very reasonable terms, and as they must be included in the extension of the city's limits, will largely appreciate in value. See advertisement in this issue.

**THE SOUTHERN BUILDING & LOAN ASSOCIATION**, of Atlanta, Ga., is a new enterprise chartered by the State of Georgia, with an authorized capital of \$20,000,000. It is officered by some of the wealthiest and most prominent citizens of the State and city, and has already established branches in all of the Southern and some of the Northern States, and is seeking to do a national business. It has some new and excellent features. The managers solicit inquiries and correspondence from interested persons.

**THE FIRM OF WILSON, MORTON & LEEDY**, real estate, money, stock and bond brokers, of Birmingham, Ala., is one of the most reliable in Alabama, and in a position to give accurate and full information to seekers of safe investments.

**THE GLOBE IRON ROOFING & CORRUGATING CO.**, of Cincinnati, O., in view of the largely increased demand for their specialties, to wit, steel and iron standing seam roofings, corrugated iron roofing, siding and ceiling irons, have lately placed orders approximating a cost of \$5,000 for additional machinery of their own designs, for the purpose of more fully perfecting their already large plant for these goods. Machine for various ceiling devices will also be added, and made a specialty in connection with their other lines.

**THE WINNER INVESTMENT CO.**—The opening of the Winner bridge across the Missouri river at Kansas City will afford a striking proof of the sagacity and enterprise of the Winner Investment Co. The bridge which was conceived by Mr. Winner, the head of the company, will practically annex a rich section of country to Kansas City. The territory immediately contiguous to the bridge contains about 11,000 acres, and is held by the North Side Land & Mortgage Co., which has about \$1,000,000 invested in the scheme.

**MR. J. H. HOUGHTON**, of Boston, whose engine supply depot is so well-known, has just put in two 175 horse-power engines for the Lowell (Mass.) Electric Corporation, and has also supplied the city of Waltham (Mass.) with boilers, engines, etc., to run stone crushers. Mr. Houghton has, it is said, the largest showrooms and offices in New England to exhibit his goods, and keeps constantly on hand and ready for immediate delivery from 30 to 40 engines. Since this concern was established it has sold and put up over 275,000 engines and hoisting apparatus.

A private telephone is almost a necessity to many banks and factories, and to many business men in general, yet the expense of the Bell instrument is so great that no attempt is made to supply this want. The recent introduction of the Bennett telephone will suit all such cases where the distance is not too great. The manufacturers say the Bennett telephone is not only not an infringement of the Bell instrument, but it does not even depend upon electricity for its operation; moreover, it costs but a very little money for the service which it renders; moreover, they can be bought outright and not leased. Any information regarding this instrument not contained in the advertisement in this issue can be had by applying to its manufacturers, the National Telephone Manufacturing Co., 620 Atlantic avenue, Boston.

**MORE ABOUT THE SASH-PULLEY PATENT WAR**.—We mentioned some time ago the fact that Stephen Palmer, of Lansingburgh, had sued the Empire Portable Forge Co. of the same place for the infringement of two of his sash-pulley patents, one of which the Empire Portable Forge Co. claims to have a license from Palmer to use. Now we have another phase of this contest to chronicle, for the forge company has in turn sued Palmer for the infringement of the old Vetterlein patent, which it owns and which covers a sash-pulley made with rounded sides adapted to fit into a socket produced by a series of connectedly bored auger holes. This Vetterlein patent which the forge company owns was granted in 1876, and broadly considered covers many of the sash-pulleys now made, and as the forge company and its experts say, covers the pulleys made by Palmer. The contest promises to be an earnest one. Essek Cowen is counsel for the forge company and Nelson Davenport counsel for Palmer.—Troy (N. Y.) Press.

**THE "AUBURN" WATCHMAN'S REGISTER AND FIRE-ALARM**.—The Bundy Manufacturing Co., Binghamton, N. Y., mail on application a neatly illustrated descriptive circular of the "Auburn" watchman's register and fire-alarm. This contrivance is practically a "watcher of the watchman," as it infallibly reports any neglect on his part to make his assigned rounds. With the fire-alarm attachment the register becomes doubly valuable, since the watchman need relax his attention only long enough to place his key in a station box and wait the required time for the alarm to sound.

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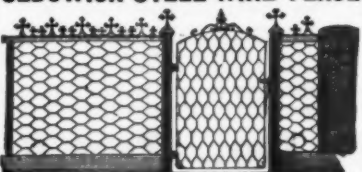
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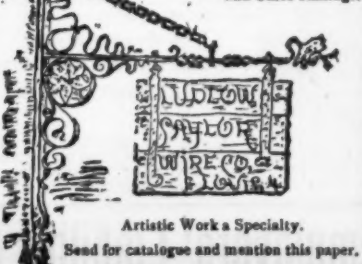
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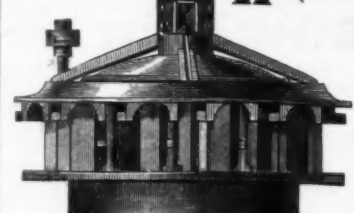
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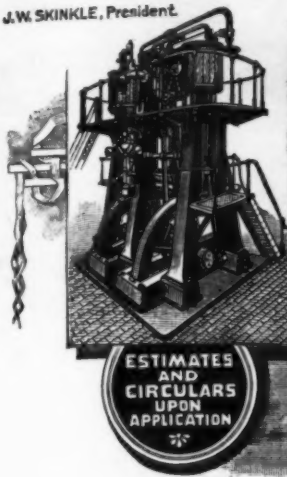




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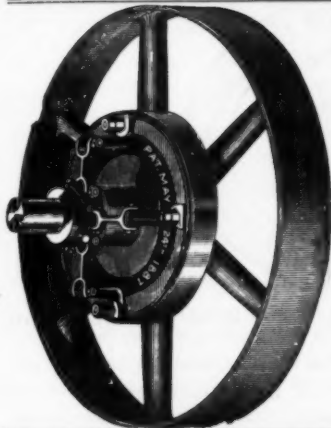
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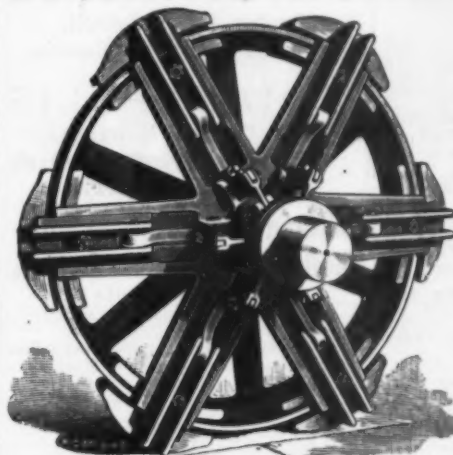
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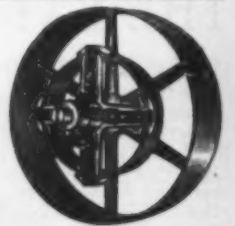
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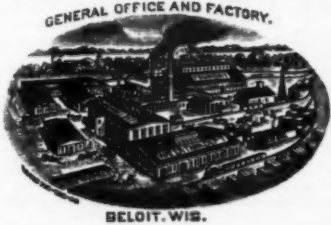
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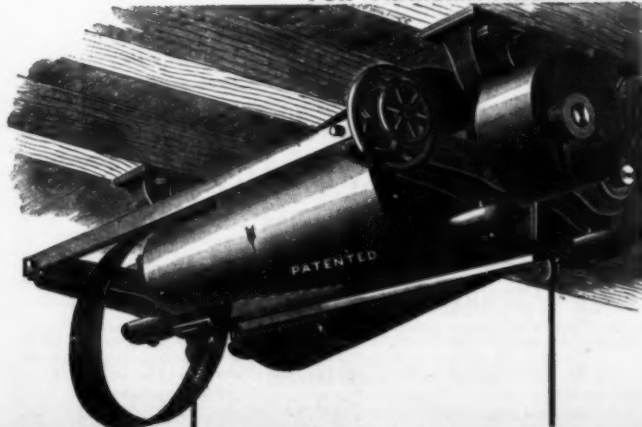


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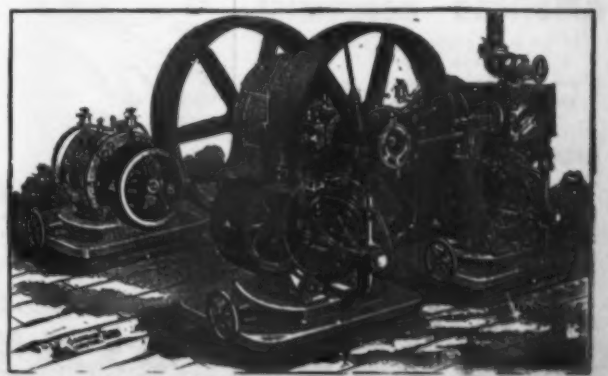
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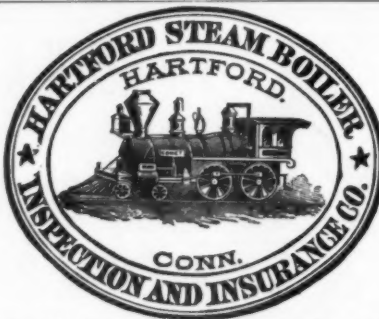
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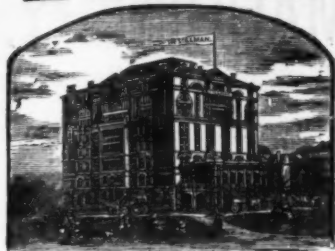
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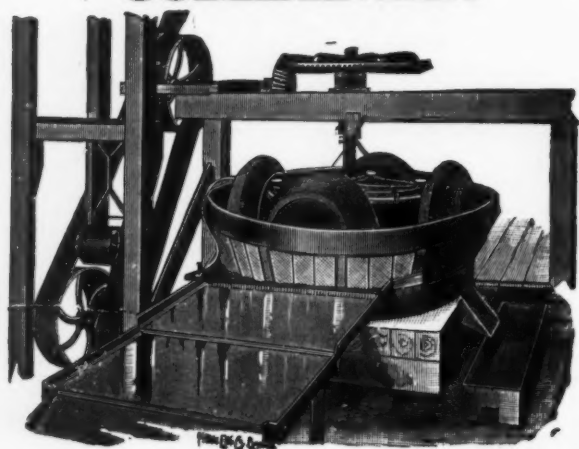
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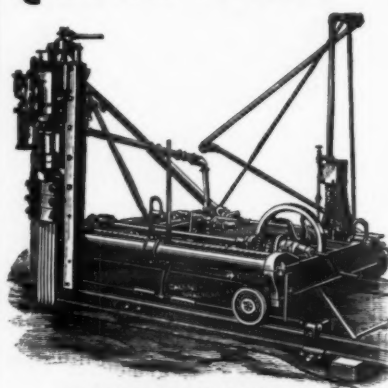
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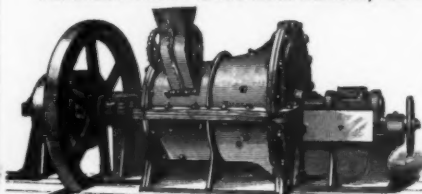
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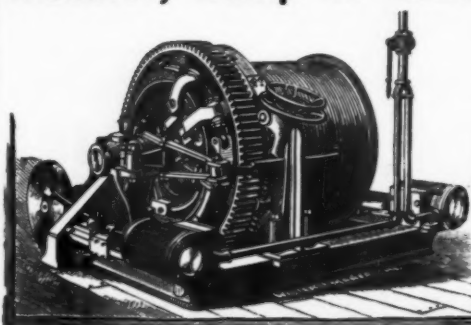
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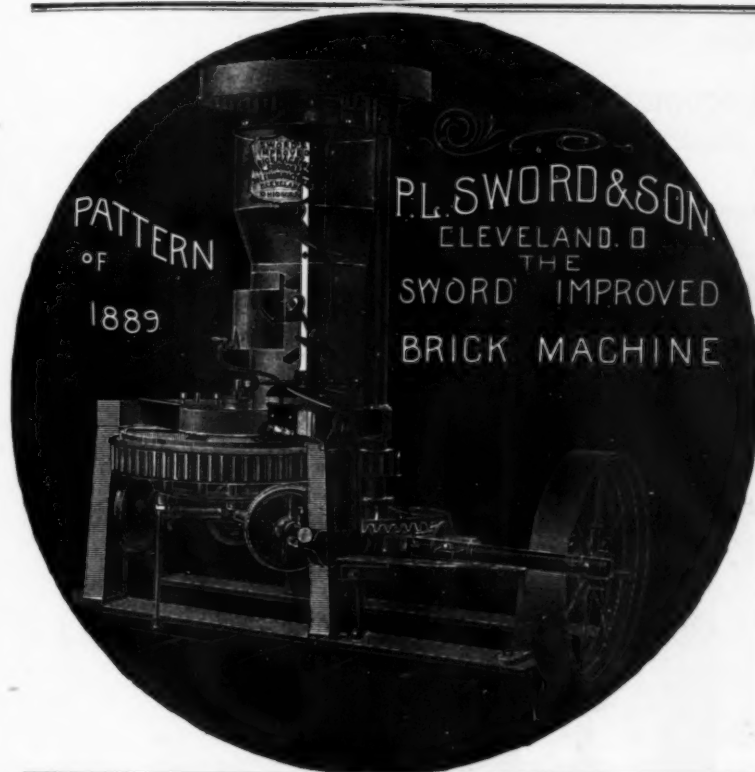
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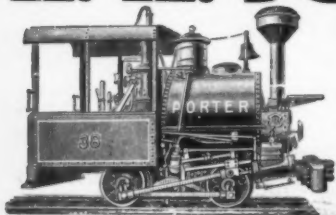
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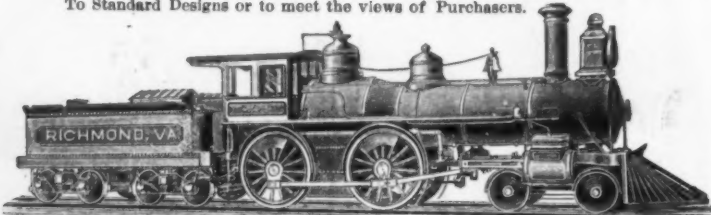
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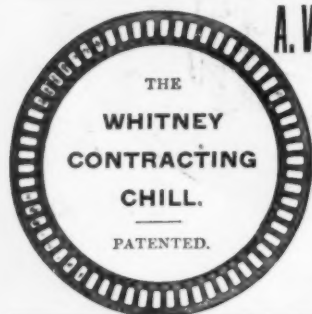
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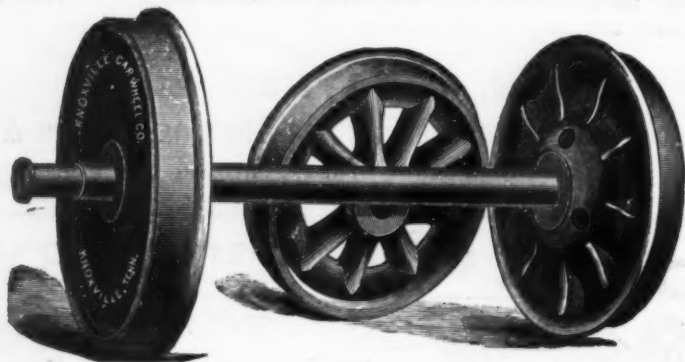
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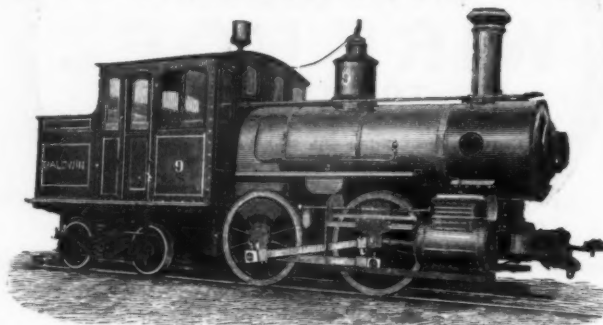
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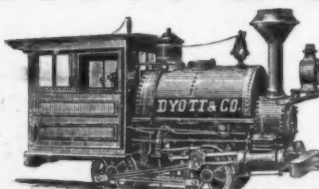
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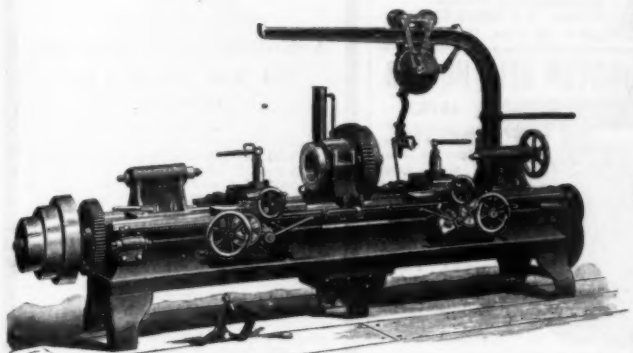
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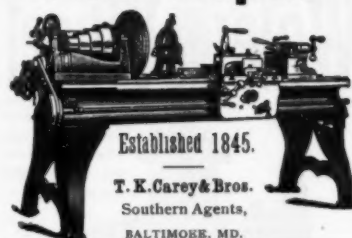
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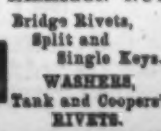
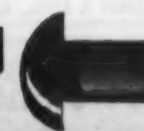
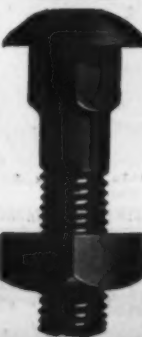


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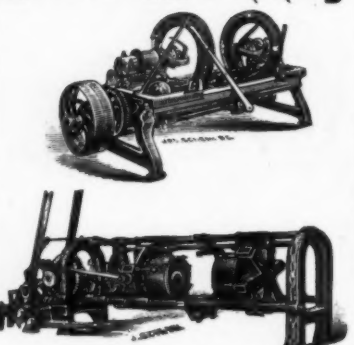
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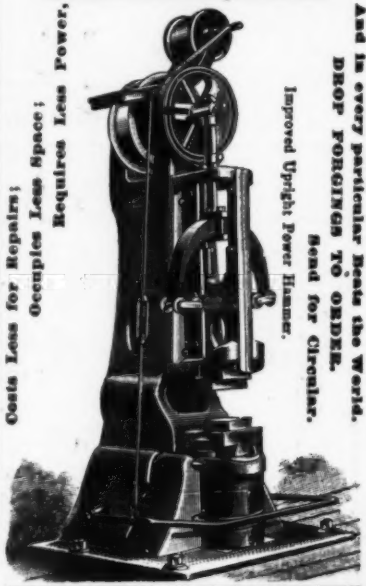
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Real Estate Record, Sept. 11, 1889.*

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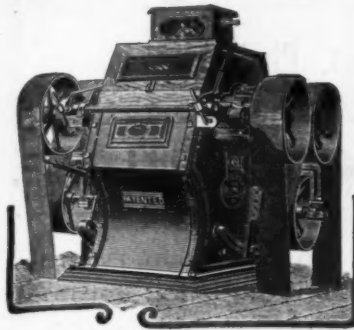
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### Cornice Makers' Squaring Shear.

The accompanying illustration is a new cornice makers' squaring shear recently

materials. The pillow block is made with brass quarter boxes filled with the best hard metal.

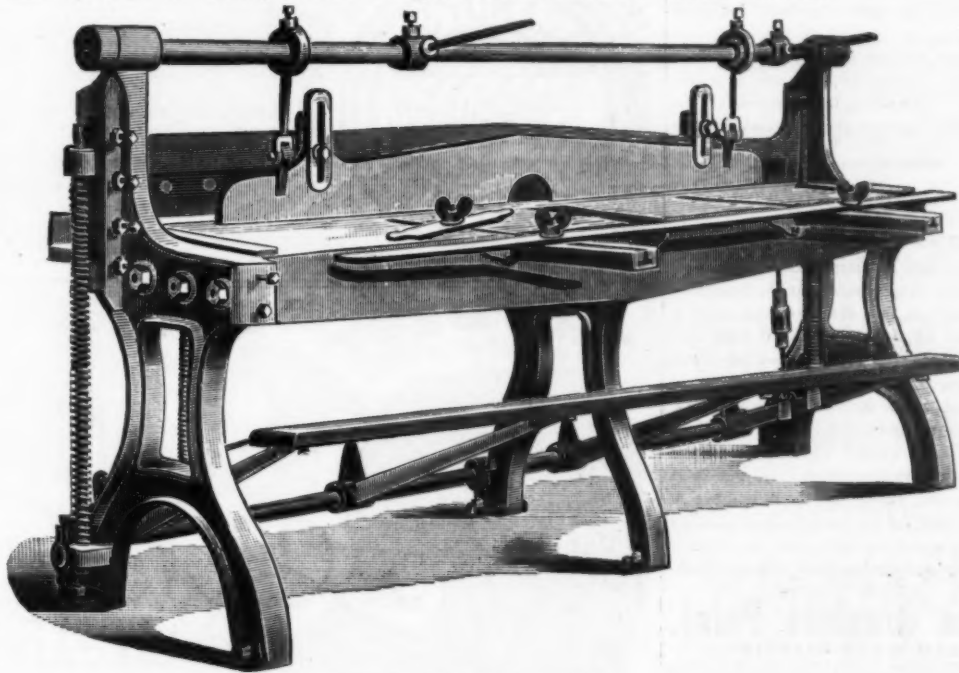
The slide valve is so constructed that it will cut off at  $\frac{3}{4}$  stroke without the loss of

These engines are very durable, and, if properly oiled and cared for, will last a lifetime.

For prices and further particulars address the manufacturers.

and are contributed by Bogesen, W. O. Stoddard and Grant Allen, authors whose sign manuals are certificates of well-planned and well-told stories. "The Light on Black Ledge" is a clever Canadian story. "A Military Snow Fort," by Lieut. Hamilton, will be of interest to the boys. A very readable article about "Saleswomen and Cash Girls," by Mrs. Sallie Joy White, opens a series of papers on "Business Openings for Girls and Young Women." Another readable article is "Confessions of an Amateur Photographer," with humorous illustrations. "Children's Portraits in the Louvre" is beautifully illustrated. For the little people we have "Puk-Wadjies" and "The Red Velvet Pig," as also "Santa Claus on a Vegetable Cart," a genuine Christmas story, fresh and pathetic. Frances L. Mace and Eli Sheppard contribute the illustrated poems. D. Lothrop Co., publishers, Boston. \$2.40 a year.

THE CALDWELL, Birmingham, is one of those new and modern hotel structures which are rapidly multiplying in the South. The lack of good hotels has been a great deficiency in this section, but not only the cities but the principal towns also are working for its correction. Among the best of the new Southern hotels is the Caldwell, at Birmingham—a spacious fire-proof structure built after approved designs and supplied with all the modern equipments. Mr. Jewell, the manager, is a model host, and with his trained staff of assistants is prepared to fully meet the de-



CORNICE MAKERS' SQUARING SHEARS.

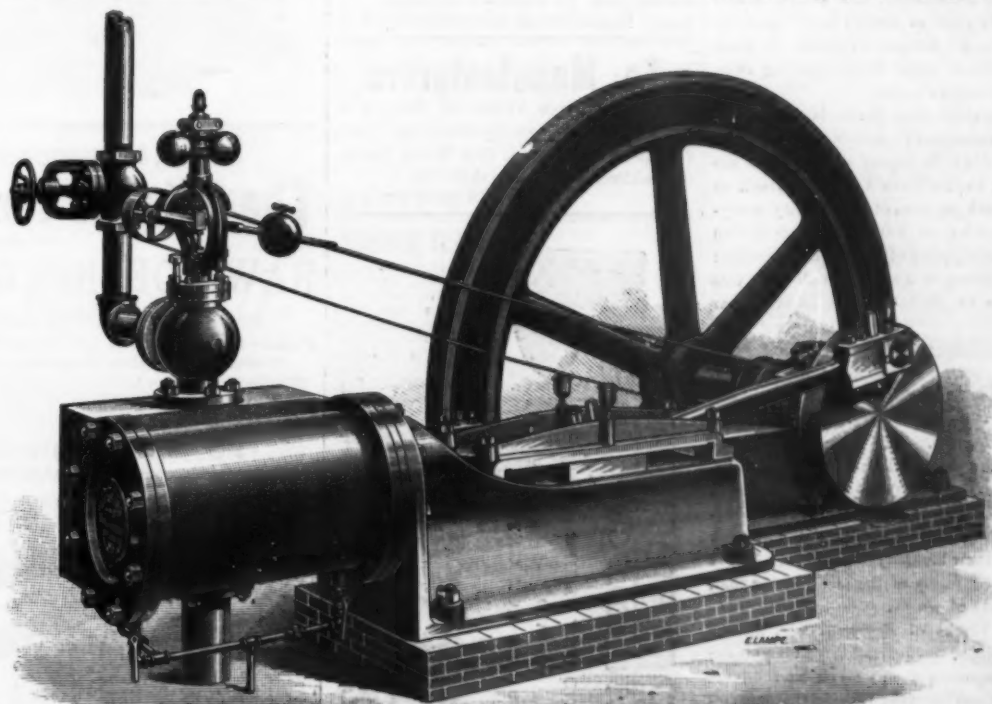
placed upon the market by the Niagara Stamping & Tool Co., of Buffalo, N. Y. This shear is made in four sizes, and the 7, 8 and 10-foot shears are strengthened by a third leg in the center of the bed to prevent the same from springing. The shear is fitted with this firm's new compound treadle, which is a marvel of strength and simplicity. Another improvement that we notice is the addition of the so-called automatic gage setting apparatus for the back gages, whereby the operator is enabled to stand at one end of the shear and set both gages accurately at once. The shear is fitted with a hold-down actuated by a lever, as shown in the cut, and with all the necessary gages, springs, &c., and is capable of cutting No. 18 gage iron. The shear shown in the cut is an 8-foot one and weighs 3,000 lbs., and altogether is built in the most substantial and workmanlike manner. Further particulars may be obtained by inquiring of the makers.

### Improved 12x16 Engine.

The accompanying cut illustrates an improved slide valve engine (size 12x16) manufactured by St. Louis Iron & Machine Works, St. Louis, Mo.

This engine is designed and gotten up to supply a long felt want of a better and stronger engine than usual line of slide valve engines built for the market. It can be run up to 175 revolutions if need be, to obtain 40 to 50 horse-power. All the wearing parts are constructed of the very best

any power, thereby saving a large proportion of steam and fuel. The extra heavy turned fly-wheel regulates the speed equal to a watch dial.



IMPROVED 12x16 ENGINE.

THE CHRISTMAS WIDE AWAKE, while fully meeting the requirements of a holiday number, does not curtail any of its leading features. The serials are of a high order,

mands that are made upon his excellent house. The Caldwell fills a need which the "Magic City" has for a long time hitherto experienced.

## The Markets.

OFFICE MANUFACTURERS' RECORD,  
BALTIMORE, December 18, 1889.

The volume of business in the various iron markets of the country for the past five or six days has been light. For this condition of things there are several reasons. One is the fact that nearly all buyers have decided to wait until after the holidays before buying large additional stocks. A second is that sellers are asking very high figures and will not yield. Another is that a great deal of work will reach manufacturers after the holidays, and they think it best to have control of the work before placing the orders for supplies. The question among consumers of raw material now is, can prices be maintained at the outside figures now quoted, and can the upward tendency continue? On this point opinions differ widely. The probabilities, however, are that the present high prices will be maintained, and that for some kinds of iron and steel products an advance will be developed within 30 days. Bessemer pig and steel billets, blooms and slabs have advanced, and even with all the increase in production, the output is not sufficient to meet the actual market requirements. Profits are phenomenal, and, in consequence, the producing capacity is being rapidly increased. The demand for Bessemer pig is very heavy. Speculative buyers are in the market, particularly in the West. New steel-making establishments are projected in many localities.

The pig iron situation may be briefly summarized as follows: The present production is about 170,000 tons per week, as against 134,000 tons on September 1st. The greatest increase has been made in bituminous and coke irons, the production of which on December 1st is estimated at 116,000 tons per week, as against 96,000 tons on September 1st. Notwithstanding this heavy increase in output, prices have steadily advanced. Forge iron is selling to-day in Northern markets at \$17 to \$18; No. 1 foundry at \$19 to \$20.50. Western markets are active, particularly at Chicago. Large blocks of Southern iron are being hurried forward. Notwithstanding the fact that furnaces are oversold, orders are presented for acceptance, and asking prices are readily paid or agreed to be paid by buyers who are anxious to cover. A great deal of iron is being held, awaiting shipment at Southern points.

The finished iron trade is in a most healthy condition; nothing really new can be added in regard to it. Mills are oversold; buyers have very little stock on hand; work is crowding capacity everywhere, and buyers find themselves driven to mills for supplies of material. Merchant bars are strong at 2 cts. in small lots; this figure can be shaded only a little on car lots.

Nails are active at \$2.20 East and \$2.50 West for iron, with additions of 20 to 30 cts. for steel. Skelp iron is in active demand. Pipe mills are as busy as they were two months ago. The same observations apply to the plate and structural iron mills, and a great deal of new work is ready to be placed. Several brokers have specifications for large lots of bridge plate and tank iron, and their inability to place such orders tells the condition of the trade better than a multitude of words.

Large blocks of Bessemer pig, billets, blooms, slabs, spiegel and ferro-manganese are in negotiation this week, and buyers seem anxious to make themselves safe before January 1st, lest in the meantime something may occur to force prices higher.

In regard to steel rails, it is impossible, by the closest inquiry, to obtain a single satisfactory item of information. The only facts known are that several large

builders and buyers are ready to place orders if satisfactory figures could be secured; what satisfactory figures are, however, it is hard to say. We have not heard of any rail transactions recently at less than \$35 East and \$37 West. We do know that there are parties in the market trying to place orders at one to two dollars less.

Old rails are extremely scarce, and some brokers are asking \$27.50 to \$28; buyers admit that in some cases they have been obliged to pay these figures in Northern markets.

Advices from abroad indicate a very active condition in all branches of trade, especially in marine engineering. Rail mills are very busy.

In New York markets wire nails are quoted at \$3 per keg for car-load lots at factory. Cut nails are retailing at \$2.25 in Eastern markets. The demand for barbed wire is unprecedented; the spring demand will probably be in excess of any previous season. An advance is looked for.

The demand for lake ore has also been very heavy, and large quantities have been sold within the past ten days for 1890 delivery.

The iron market is threatened with a speculative movement; if such a movement does take place, it is impossible to predict the disasters that will be likely to follow.

### HARDWARE.

The volume of trade and general values continue as last reported. Leading staples having been largely sold ahead, shipments being made in turn are slow, and quite a good deal of complaint arises from this cause. While the market continues firm, there have but few actual advances since last report, a new discount sheet on tacks, dated 12 inst., showing the only important change of the week. The manufacturers are acting very conservatively, but it is probable that there will be a number of changes after the 1st proximo, necessitated by the enhanced values of raw material.

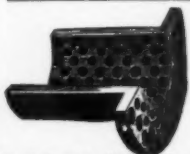
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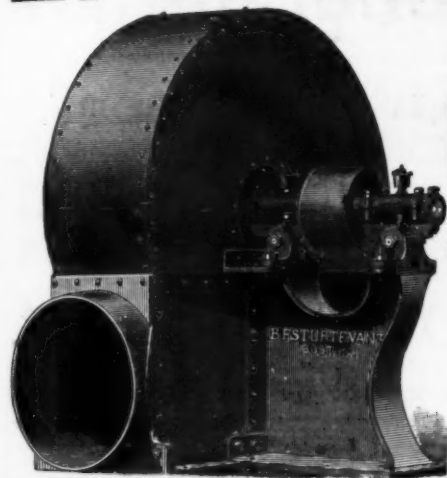
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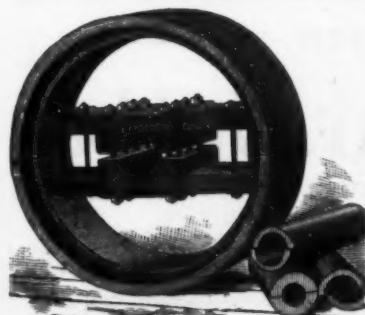
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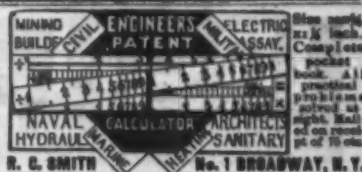
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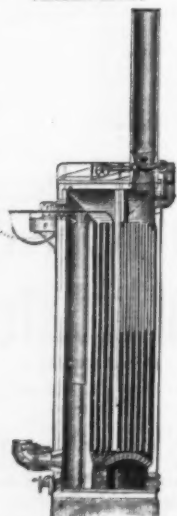
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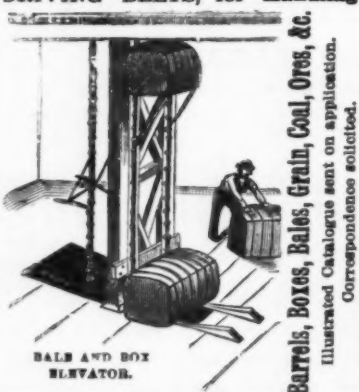
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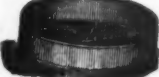
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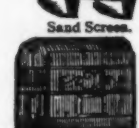
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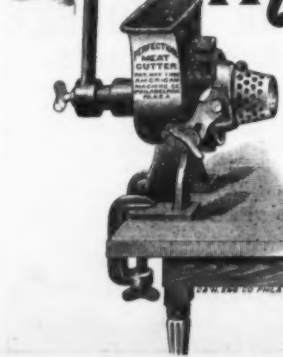
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**FIRE-PROOF SHUTTERS.**  
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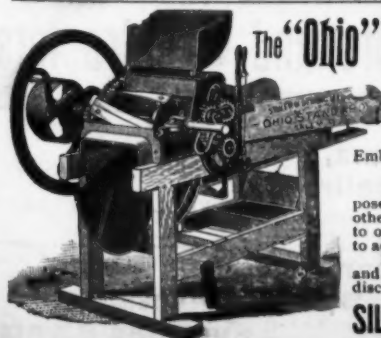
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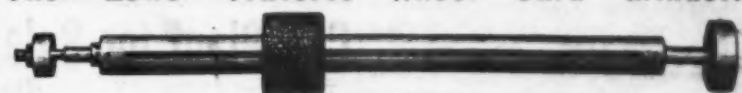
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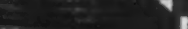
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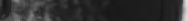


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CHICAGO BRANCH, 99 MADISON ST.

## Eastern Lumber Markets.

[Spec. corresp'dence MANUFACTURERS' RECORD.]

NEW YORK, December 17, 1889.

Several informal little meetings of lumber dealers have been held in this city within the past few days, with what result is not yet apparent. Whether these dealers are dissatisfied with the existing organization does not appear, but from what has been dropped, it would seem that there is an impression that some more efficient organization is desirable. It is necessary for things to be said and done which are impossible in an organization in which every one is welcome, whether he does a business of a million dollars a year or only fifty thousand. There are trade secrets which cannot safely be imparted to the smaller fry; there is a certain necessity for large operators to associate together and exchange views, which cannot exist between the large operators and the small ones. These conferences may be accidental, but they mean more than appears on the surface; the occasion for them may be found in the fact that the demand for Southern lumber has increased to such an extent, and, on the other hand, the demand for Southern lumber in the South is such that the usual excess of supply for this market has been greatly decreased, if not absolutely cut off. In other words, the demand and supply have been equalized, and prices in the future will be harder and better. If this is the case, and it is intimated that this is at the bottom of the whole thing, it simply means that there will be a new organization of New York lumber interests before 1890 is out. There is room for improvement, but this is not meant to reflect upon the active and zealous officers now in charge.

Receipts of yellow pine have not been heavy, nor is there any evidence of what might be termed an accumulation. Prices are as strong as at any time this season, and retailers are about as anxious as they were two months ago to buy. Builders are pretty well through, and only purchase what they need from week to week.

In regard to North Carolina pine, there is a scarcity of certain measurements, but this will soon be overcome by car arrivals. There have been a good many receipts of hardwoods lately by car, which have not passed through the yards. Buyers are having shipments made to them direct from Southern points. The most encouraging movement this week has been in plain and quartered oak; poplar and also cherry have been active. The demand for poplar, which has recently sprung up, is due to the very strong attitude of the association in the Southwest, and also to the fact that Western demand is proving much larger than we had expected.

Those who carry large stocks of ash have less than half the quantity they usually have at the close of the year. They have been endeavoring to work off stocks, not desiring to hold on account of not having faith in high prices. Buyers of ash have been quick to accept the opportunities to buy at a shading, so also have buyers of cherry.

Walnut is a drug in the market for rejects. Nothing but the finest boards are selling at outside prices. Log exports would be much heavier if freights were reasonable.

The cigar-box manufacturers are very busy, but have a good deal of sycamore to fall back on. Those who have maple in stock have sold a good deal lately to complete flooring contract work.

The carriage builders and wagon makers are willing to buy largely if prices suit. These buyers are very conservative in the East, and seldom buy heavily except at bargain prices.

A great deal of lumber is being shipped to and through the New England States,

A great deal of factory extension is contemplated, and builders have work of this kind in sight, and are preparing for it. The car trade in Southern lumber this winter is likely to be very heavy.

### BUTTE, MONTANA,

The railroad, mining and commercial center of the new State, offers some of the best inducements for investments in Real Estate, Mines and Mining Stocks of any locality in the Northwest.

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TO THE HIGHEST BIDDER,  
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### Cotton and Woolen Mill,

located in Terrell, 32 miles east of Dallas, on the Texas & Pacific Railroad, consisting of one two-story brick, tin-roof building, 150x60 feet, and the machinery necessary for a 2,200-spindle mill, with 35 looms, all in position. Will be sold to the highest bidder on the 22d day of January, 1890. Address

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of 38,000 acres in a solid body, well improved; comprising a peninsula on the Gulf coast near the harbors of Corpus Christi and Aransas Pass. Land good; well suited for cultivation; soil rich; excellent native grass; no cold weather; no feeding needed; cattle graze through the year. Locality healthy; Gulf breeze makes summers cool. Fish and oysters plenty. Wild ducks and geese abundant. As a breeding ground for cattle, mules or horses, this locality is not surpassed in the world. The cattle on this ranch, raised on it, for sale at market prices. Price of the land \$3.00 per acre. Send for circular and map.

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### Gas Plant for Sale.

The Gas Plant at Richmond, Ky., (a city of 6,000 inhabitants,) with 125 private consumers and city using gas at a profitable rate, is offered for sale privately. ALSO A COMPLETE WATER WORKS, charter granted by the legislature of Kentucky. The city is anxious to subscribe stock or will take a sufficient number of hydrants to make it a paying investment. Also an electric light charter from same source. The city is willing to make a contract for public light. The above property is owned by a corporation, and individuals who wish to close out at once. Persons desiring to buy will communicate with or call on

G. W. EVANS, Prest., or  
CHAS. S. POWELL, Secy.,  
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Large and small tracts Yellow Pine, White Oak,  
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This pleasant and growing city invites enterprising citizens and capitalists from all parts of the civilized world.

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**Splendid Opening for Men of Push and Energy.**

The City of Wilmington has made an appropriation of \$150,000 for the purpose of encouraging manufacturing.

### ADVANTAGES OFFERED.

Climate favors work the entire year. Labor abundant and cheap, living economical. Freight rates are low by rail to interior points. Shipping rates by steamships and vessels low to all parts of the world.

**NO BETTER POINT FOR PROFITABLE INVESTMENT.**  
We have the raw material in abundance.

### Facts About Wilmington.

A seaport city of 35,000 population. An important naval store, cotton and lumber market. Extensive shipping interests. A secure, fresh water harbor. Depth of water on bar 18 feet at mean high water; under government supervision, being continually deepened. Excellent terminal facilities. Four railroads in operation, two in process of construction. Surrounded by attractive summer resorts. Adjacent territory especially adapted to trucking, peach growing, vineyards and rice culture. Drainage excellent.

Health and climate unsurpassed. An all-the-year-round resort—"THE LONG BRANCH OF THE SOUTH."

Excellent schools and churches of all denominations. A cordial welcome extended to all good citizens and men of push and intelligence.

Three banks, with ample banking facilities. Among the manufacturing enterprises now in operation are numbered: Cotton, Pine & Lumber, Fertilizer, Wood Working and Ice Factories, Rice, Flour and Planing Mills; Foundry, Machine Shops, Gas, Electric Light Plants, Cotton Compresses, Crooked Lumber, Car and Water Works.

We invite all to come and see, and on the spot to judge for themselves. Wilmington offers excellent hotel accommodations, and a committee of its Chamber of Industry will extend to strangers seeking home and investment cordial greeting and attention.

Persons who may desire fuller information can obtain it by addressing  
**The Chamber of Industry, Wilmington, N.C.**

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The best of farm and grazing lands. No malaria. No mosquitoes. Sublimely climate. Gorgeous scenery. Water power unlimited. Factory sites donated. Property at first hands, so get in on "rock bottom." Write to, or call on

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## CAMDEN,

The Capital of Kershaw County,  
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This ancient and historic town is noted for its dry atmosphere, pure water, beautiful scenery, healthful climate and refined society.

It is the center of a rich agricultural country, which contains great natural resources. Hardwoods of many species are abundant, and great forests of long leaf pine, which impregnate the air with terebenthine odors. Several good hotels entertain travelers, and two are carefully conducted for the especial comfort of northern health and pleasure seekers.

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Churches and schools are numerous and well sustained.

A cotton mill company has been organized, and the first installment of twenty per cent. has been called in.

Land is cheap. The climate is salubrious, and subject to no extremes during the year.

Camden invites capitalists, manufacturers, pleasure and health seekers and sportsmen to visit the city and examine the advantages it offers to all.

All inquiries will be promptly answered by the undersigned, official representative of the intendand and warders.

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**Land, Mining & Mfg. Co.**

**WATERLOO, Lauderdale, Co., ALA.**

will encourage the location of manufacturing and industrial enterprises in the town of Waterloo by donations of town lots, mineral and timber lands, and stock of the company. Persons who contemplate engaging in enterprises of the character in North Alabama are requested to consider the advantages, present and prospective, of this point before deciding to locate elsewhere. Waterloo is situated on the north bank of the Tennessee river, below Colbert Shoals and consequently at the head of summer navigation on said river. During low-water stage light draft steamers run from Waterloo to Florence, Sheffield and other points above the shoals, freight being transferred at Waterloo. At this season goods may be billed from St. Louis, Cincinnati, Louisville, Evansville and all Western river cities to Waterloo cheaper than to any other town in Alabama. Chickasaw excepted. Waterloo is in the heart of the mineral belt, the immense beds of iron ore of Wayne and Lauderdale Counties lying in close proximity (5 to 10 miles). Limestone, silica and kaolin are abundant and close. The largest area of virgin forest in North Alabama lies in sight. The Land Company owns large bodies of this, together with many valuable town lots. The water supply is abundant and pure. Scores of springs bubble up within the town limits and the limpid waters of Second Creek wash the eastern border. The health of the community is unexcelled and the cost of living cheap. This is the largest shipping point for tan bark in the state. Present price of bark at landing \$4.50 per cord. Special facilities for tanning leather. The Land Company will donate a large body of fine timber and mineral land in a block to secure the construction of a railroad, north or east from Waterloo, such a road being needed in connection with the unequalled facilities of water transportation enjoyed by the town. Liberal aid will be given to persons who will locate industries here that give employment to labor and add value to raw material.

No matter what you intend to manufacture, consult the Waterloo Land, Mining & Manufacturing Co. and learn what facilities for the prosecution of your business the place enjoys and what inducements will be offered you to come. All questions truthfully and fairly answered.

For further information consult the President, Secretary or Hon. Hiram Richardson, Vice-President, Waterloo, Ala.

## To Those Looking For MANUFACTURING SITES IN THE SOUTH

The most desirable locations in the South for manufacturing wagons, stoves, agricultural implements, furniture, or for foundries, machine shops, rolling mills, muck bar mills, nail works, glass works, cotton or woolen mills, and tanneries, are to be found in Virginia along the line of the Norfolk & Western Railroad from Norfolk to Bristol, and upon its branch lines. Hard wood of every variety; pig iron from the furnaces at Lynchburg (2), Roanoke (2) in operation and 1 now under construction), Pulaski (1), Ivanhoe (1), Radford (1, to be built in 1890), Salem, Graham and Max Meadows (1 at each point now under construction); bar iron from the rolling mills at Roanoke and Lynchburg; coke and semi-bituminous coal from the Pocahontas Flat Top field; superior gas coals from mines on the Clinch Valley Extension; glass sand from Tazewell county; cotton from the markets of the Southern States, and wool from all the Western and Southwestern States and Territories at advantageous freight rates. Favorable freight rates made upon raw materials to all factories established upon its line, as well as to points in the United States and Territories upon the manufactured articles.

Those seeking new fields for manufacturing establishments should not fail to investigate the wonderful development in iron, coal and coke industries that has been made within the past five years along the line of the Norfolk & Western Railroad, and the advantages offered by the State of Virginia in the supply of cheap raw materials; by the Norfolk & Western Railroad in the matter of freight facilities and rates upon raw materials and for reaching home, far distant and foreign markets, and by the cities and towns along its line in the way of advantageous sites at moderate cost. Many of the cities and towns exempt manufacturing establishments from taxation for a series of years.

For further information as to freight rates and sources of supply of raw materials, apply to A. Pope, General Freight Agent, Roanoke, Va., or to

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7x2	1 to 1 1/4	0 90	1 75	2 50	4 75
7x2 1/2	1 to 1 1/4	1 10	2 30	3 00	5 75
7x2 1/2	1 to 1 1/4	1 40	2 80	3 75	6 75
8x2 1/2	1 1/4 to 1 3/4	1 75	3 50	4 50	8 25
8x3	1 1/4 to 1 3/4	2 50	5 00	5 50	10 50
9x3	1 1/2 to 2	3 50	7 00	7 50	14 25
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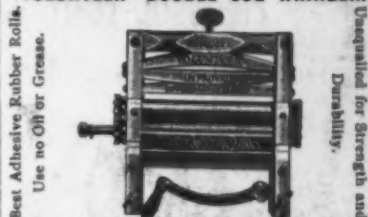
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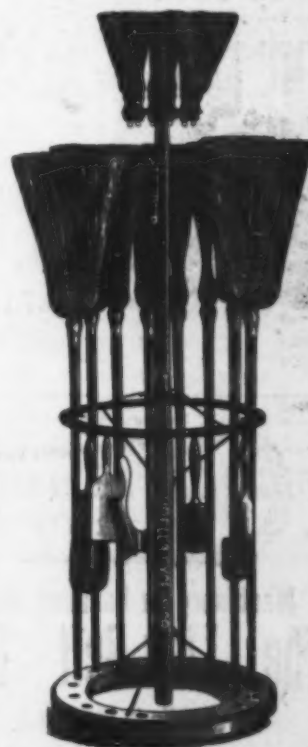
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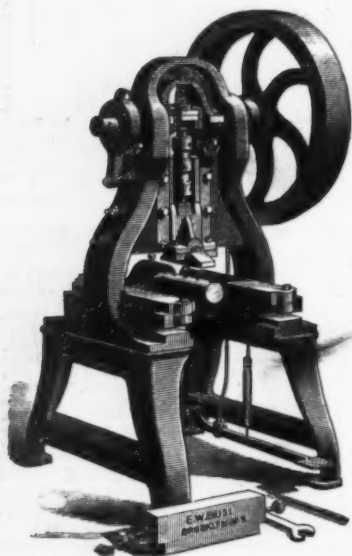
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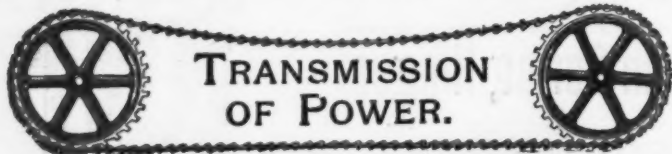
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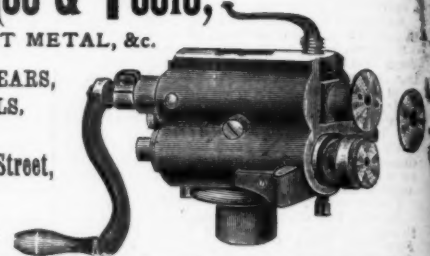
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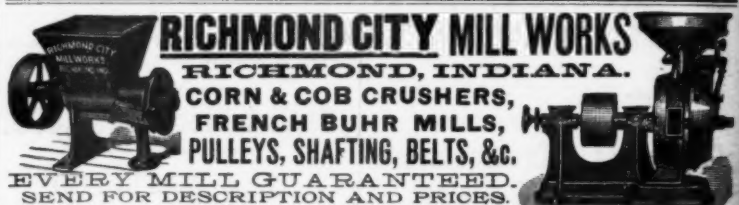
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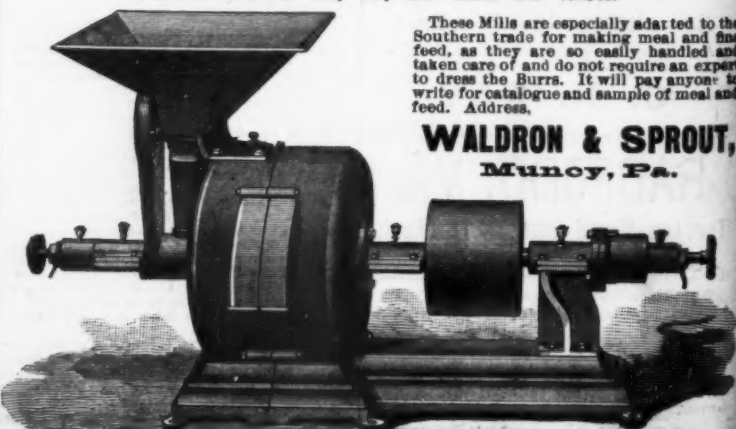
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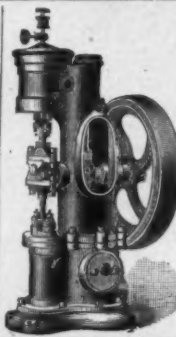
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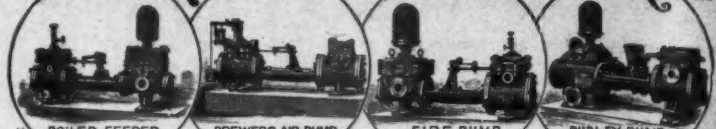
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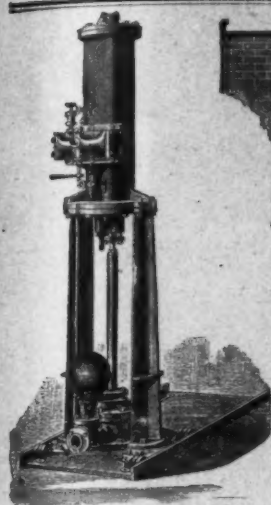
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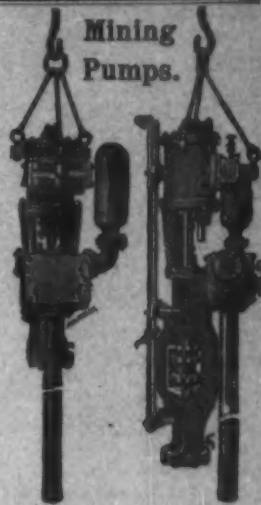
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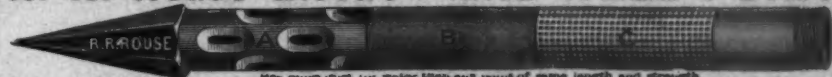
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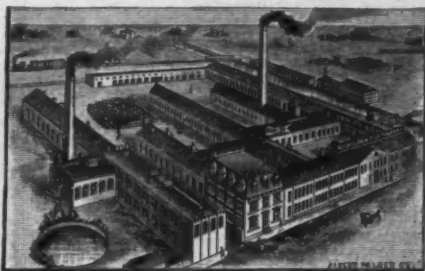
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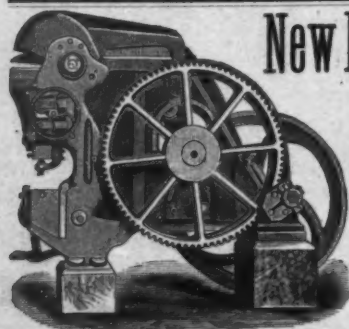
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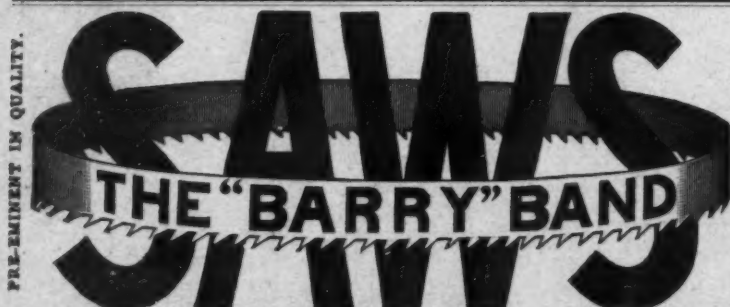
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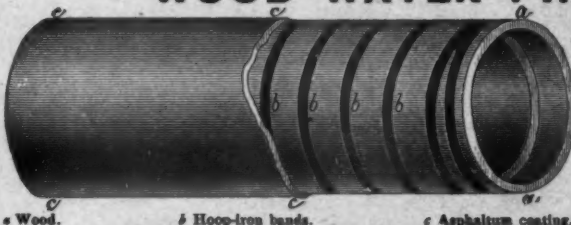
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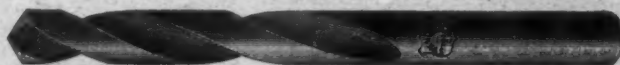
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